***ATP 3-90.5 (FM 3-90.5)**
Final Draft
August 2014

COMBINED ARMS BATTALION

The material in this manual is under development. It is NOT approved U.S. Army doctrine and CANNOT be used for reference or citation. The approved FM is still current and must be used for reference or citation until this draft is approved and authenticated.

Headquarters, Department of the Army

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Combined Arms Battalion

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*This publication supersedes FM 3-90.5, 4 July 2008.

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Preface

This Army Techniques Publication (ATP 3-90.5) describes the techniques and procedures to tactically employ the combined arms battalion (CAB), the primary maneuver force of the Armored brigade combat team (ABCT) in unified land operations. While providing basic doctrinal principles, it attempts to refer tactical discussion out to the Brigade Combat Team Operations Field Manual (FM 3-96) and other appropriate manuals. This manual provides techniques and procedures appropriate for the CAB to effectively exercise the warfighting functions of mission command, movement and maneuver, intelligence, fires, sustainment, and protection, in the conduct of sustained combined arms and close combat land operations. The techniques and procedures described herein are intended as a guide and are to be viewed as flexible in application, depending on the factors of mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC). Each situation in combat must be resolved by adaptable leaders who exercise initiative to intelligently interpret and apply the doctrine set forth herein.

The principal audience for ATP 3-90.5 is the commander and staff of the CAB and its subordinate units. This manual emphasizes CAB operations with related information at the Armor and mechanized Infantry company team level. Greater details and techniques on Armor and mechanized Infantry company team operations can be found in ATP 3-90.1.

Commanders, staffs, and subordinates ensure their decisions and actions comply with applicable U.S., international, and, in some cases, host-nation laws and regulations. Commanders at all levels ensure their Soldiers operate in accordance with the law of war and the rules of engagement. (Refer to FM 27-10 for more information.)

ATP 3-90.5 uses joint terms where applicable. Selected joint and Army terms and definitions appear in both the glossary and the text. For definitions shown in the text, the term is italicized and the number of the proponent publication follows the definition. This publication is not the proponent for any Army terms.

ATP 3-90.5 applies to the Active Army, Army National Guard/Army National Guard of the United States, and United States Army Reserve unless otherwise stated.

The proponent of this publication is U.S. Army Maneuver Center of Excellence (MCoE). The preparing agency is the MCoE, Fort Benning, Georgia. You may submit comments and recommended changes in any of several ways—U.S. mail, e-mail, fax, or telephone—as long as you use or follow the format of Department of the Army (DA) Form 2028 (Recommended Changes to Publications and Blank Forms). Contact information is as following:

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Unless otherwise stated in this publication, masculine nouns and pronouns refer to both men and women.

Introduction

The focus of this ATP is to discuss how CAB leaders execute battalion-level tasks from planning through preparation and execution. The principles for planning operations are based on Army Doctrine Reference Publication (ADRP) 5-0 and the military decision-making process (MDMP). Volume 1 of FM 3-90 dicusses offense and defense, while ADRP 3-07 covers stability tasks, and FM 3-98 details reconnaissance and security operations. This ATP discusses some alternative planning processes in a time-constrained environment, but focuses more on the identifying the tasks leaders should plan to prepare for in unified land operations in varied operational environments. The functionality of this ATP will allow the force to improve upon the techniques and procedures that are specific to the CAB by allowing Soldiers to make recommendations on a Wiki site.

U.S. forces must retain those skills that have served them so well the last decade and develop a skill set necessary to identify and face a hybrid threat of regular and irregular forces that will combine conventional and unconventional tactics while fighting in complex terrain to limit U.S. forces' ability to develop the situation out of contact.

U.S. forces will continue to operate in nation-states of varying degrees and actors (nation and nonstate) that are not always readily identifiable and can quickly change allegiances. The threat will attempt to use all means at their disposal to counter, interrupt, or degrade U.S. advantages in communications, surveillance, long-range precision fires, armor protection, and mobility. We must continue to develop our Soldier's ability to operate in a variety of environments with and amongst a multitude of actors. We must prepare to face more conventional threats by relearning and sharpening skills to conduct decisive actions and transition to and from defense, offense, and stability tasks.

This publication—

- Provides the doctrinal guidance for commanders, staffs, and subordinate commanders and leaders of the organizations who are responsible for conducting operations of the CAB (that is planning, preparing, executing, and assessing).
- Serves as an authoritative reference for personnel who—
  - Develop doctrine (fundamental principles and tactics, techniques and procedures) materiel and force structure.
  - Develop institution and unit training.
  - Develop unit tactical standard operating procedures (TACSOP) for CAB operations.
- Does not cover deployment, reception, staging, onward movement, and integration (RSOI) or redeployment operations. Additionally, it does not provide details on defense support of civil authorities within the continental United States (CONUS). (Refer to ADRP 3-28 and its subordinate ATPs for more information.)
- Provides urban operation considerations. (Refer to ATTP 3-06.11 for more information.)
- Addresses operations for CABs organized under the Army modular concept that governs the development of equipment, training, and structure for Armor and mechanized Infantry battalions of former mechanized divisions.
- Highlights the importance of the forward support company (FSC) and likely engineer augmentation by discussing their employment and contributions to all CAB operations.
- Reflects and supports the Army operations doctrine as stated in ADRP 3-0, ADRP 5-0, FM 3-90-1, FM 3-90-2, and FM 3-96. This is not intended as the sole reference for CAB operations; rather, it is intended to be used in conjunction with existing doctrine.
- Is published to provide CABs the framework in which they can operate as part of an ABCT, or when attached to an Infantry BCT (IBCT) or Stryker BCT (SBCT).

Summary of Changes

FM 3-90.5 has been updated and provided as an ATP in accordance with 2015 Doctrine Strategy. In addition to doctrine changes, a significant effort has been made to eliminate redundancies with parent doctrinal manuals (for example ADRP 3-07). The end results are a reduction of chapters, from 12 to 8.

Chapter 1 introduces unified land operations. It discusses an operational environment as a combination of the political, military, economic, social, information, infrastructure, physical environment, and time variables (PMESII-PT). It also combines content from previous Chapters 2 and 3 to include discussion on the operational areas, the role of the CAB and the operations process.

Chapter 2 introduces reconnaissance and security operations as the primary means by which the CAB executes information collection. It thoroughly discusses reconnaissance to include aerial reconnaissance, and security tasks.

Chapters 3 discusses the characteristics of the offense, offensive tasks and forms of maneuver. This chapter also discusses direct fire control measures during the offense.

Chapter 4 discusses characteristics of the defense, defensive tasks, forms of the defense, and direct fire control measures in the defense.

Chapter 5 is largely unchanged. Chapter provides discussions of stability specific CAB operations to include patrols, searches, and military transition teams.

Chapter 6 provides doctrine for the use of combat and field trains. It continues to emphasize that sustainment enables freedom of action and addresses the three major elements of sustainment: logistics, personnel services, and health service support.

Chapter 7 provides all the enabling tasks and activities into one condensed chapter (such as, linkup, passage of lines, relief in place, battle handover, assembly area operations).

Chapter 8 provides techniques for the integration and synchronization of warfighting functions as enablers to enhance the combat power of the maneuver companies (fires, aviation, protection, and engineers).

Appendix A discusses the duties and responsibilities for the battalion staff.

Appendix B includes discussion on mission command, command post operations, and signal support information system updates.

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Chapter 1

Unified Land Operations and the Combined Arms Battalion

"There is still a tendency in each separate unit...to be a one-handed puncher. By that I mean that the rifleman wants to shoot, the tanker to charge, the artilleryman to fire...That is not the way to win battles. If the band played a piece first with the piccolo, then with the brass horn, then with the clarinet, and then with the trumpet, there would be a hell of a lot of noise but no music. To get the harmony in music each instrument must support the others. To get harmony in battle, each weapon must support the other. Team play wins. You musicians of Mars must not wait for the band leader to signal you...You must each of your own volition see to it that you come into this concert at the proper place and at the proper time..."

General George S. Patton, Jr.

The role of the CAB is to close with and destroy enemy forces using fire, maneuver, and shock effect, or to repel his assault by fire and counterattack. The CAB combines the efforts of its Armor and mechanized Infantry companies to execute tactical missions as part of an ABCT, or when augmenting another brigade combat team (BCT). CABs are part of the Army's principal formation for conducting combined arms operations, capable of deploying worldwide and conducting unified land operations.

SECTION I – OPERATIONAL OVERVIEW

1-1. While ABCTs are the Army's armored combined arms force, it is the CAB, along with their main battle tanks, Infantry fighting vehicles, and Infantry squads that provide tremendous striking power. Its combination of firepower, mobility, protection, and information collection assets make it invaluable to an ABCT commander in conducting unified land operations. The CAB can fight without augmentation, but it can also be tailored and task-organized to meet the precise needs of its missions.

UNIFIED LAND OPERATIONS

1-2. Unified land operations is the Army's operating concept. It is how the Army seizes, retains, and exploits the initiative to gain and maintain a position of relative advantage in sustained land operations through simultaneous offensive, defensive, and stability or defense support of civil authorities tasks in order to prevent or deter conflict, prevail in war, and create the conditions for favorable conflict resolution. (Refer to ADRP 3-0 for more information.)

FOUNDATIONS OF UNIFIED LAND OPERATIONS

1-3. Commanders can achieve strategic success by integrating the four foundations of unified land operations initiative, decisive action, core competencies, and mission command. The foundations of unified land operations begin and end with the exercise of individual and operational initiative.

Initiative

1-4. Operations aim to seize, retain, and exploit the initiative and achieve decisive results by striking the enemy, both lethally and nonlethally, at times, places, or in manners for which the enemy is not prepared. Leaders at all levels, operating under mission command, exercise their discretionary judgment to assume risk and take the initiative to successfully accomplish the mission. Operational initiative is setting or dictating the

terms of action throughout the operation. Individual initiative is the willingness to act in the absence of orders, when existing orders no longer fit the situation, or when unforeseen opportunities or threats arise.

Decisive Action

1-5. Decisive action is the continuous, simultaneous combinations of offensive, defensive, and stability or defense support of civil authorities tasks. CABs must be prepared to conduct any combination of these primary tasks either independently or as part of a larger force. The CAB is better designed for three of the four tasks of decisive action: offense, defense, and stability tasks. The CAB could also be given the task of supporting homeland defense within the United States and its territories. In this case, they will combine the elements of defense support of civil authorities and, as required, offense and defense in conducting decisive action. The tasks are as follows:

- **Offensive.** These are combat operations conducted to defeat and destroy enemy forces and seize terrain, resources, and population centers. They impose the commander's will on the enemy. Even when conducting defensive tasks, seizing and retaining the initiative requires executing offensive tasks at some point.
- **Defensive.** These are combat operations conducted to defeat an enemy attack, gain time, economize forces, and develop conditions favorable for offensive or stability tasks. Successful defenses are aggressive, and commanders use all available means to disrupt enemy forces.
- **Stability.** These include various missions, tasks, and activities conducted outside the United States in coordination with other instruments of national power to maintain or reestablish a safe and secure environment, restore essential government services, and provide emergency infrastructure reconstruction and humanitarian relief.
- **Defense support of civil authorities.** Defense support of civil authorities includes tasks that address the consequences of natural or man-made disasters, accidents, terrorist attacks, and incidents in the United States and its territories. Army forces conduct defense support of civil authority tasks in support of homeland defense only after civil authorities have requested assistance and the Secretary of Defense has authorized it. This typically happens only when the size and scope of events exceed the capabilities or capacities of domestic civilian agencies. The defense support of civil authority actions are always subordinate to civilian authority control.

Core Competencies

1-6. The CAB demonstrates the core competencies of combined arms maneuver and wide area security by combining offensive, defensive, and stability or defense support of civil authorities tasks simultaneously. They employ synchronized action of lethal and nonlethal effects, proportional to the mission and informed by an understanding of an operational environment.

1-7. Combined arms maneuver and wide area security are not missions or tasks. They provide an operational context to assist the commander and staff to assist them in determining the operational approach. This enables commanders to combine the tasks of decisive action into a coherent operation that assigns missions to subordinates. The CAB executes these assigned missions to defeat or destroy enemy forces, and seize key terrain, while protecting civilians, infrastructure, and themselves.

Combined Arms Maneuver

1-8. *Combined arms maneuver* is the application of the elements of combat power in unified action to defeat enemy ground forces; to seize, occupy, and defend land areas; and to achieve physical, temporal, and psychological advantages over the enemy to seize and exploit the initiative. (ADP 3-0) Combined arms maneuver primarily employs defeat mechanisms (destroy, dislocate, isolate, and disintegrate) against enemies and is dominated by offensive and defensive tasks. Advantages of these tasks include the following:

- Physical advantages may include the defeat or destruction of enemy forces or the control of key terrain, population centers, or critical resources and enablers.
- Temporal advantages enable Army forces to set the tempo and momentum of operations and decide when to give battle such that the enemy loses the ability to respond effectively.

- Psychological advantages impose fear, uncertainty, and doubt on the enemy, which serves to dissuade or disrupt the enemy's further planning and action.

1-9. Commanders force the enemy to respond to friendly action through combined arms maneuver. In the offense, it is about taking the fight to the enemy and never allowing the enemy forces to recover from the initial shock of the attack. In the defense, it is about preventing the enemy from achieving success and then counterattacking to seize the initiative. The objective is more than killing the enemy personnel and destroying their equipment. Combined arms maneuver forces the enemy to react continuously and finally driven into untenable positions. Ultimately, combined arms maneuver aims to break the enemy's will through relentless and continuous pressure.

Wide Area Security

1-10. Wide area security is the application of the elements of combat power in unified action to protect populations, forces, infrastructure, and activities; to deny the enemy positions of advantage; and to consolidate gains in order to retain the initiative. Wide area security primarily employs stability mechanisms (compel, control, influence, and support) against enemies and is dominated by stability or defense support of civil authority tasks.

1-11. Wide area security is about retaining the initiative by improving civil conditions and applying combat power to prevent the situation from deteriorating. It is also about preventing the enemy from regaining the initiative—retaining the initiative in the face of enemy attempts to regain it for themselves. Commanders identify nonmilitary but critical objectives to achieving the end state. Such objectives may include efforts to ensure effective governance, reconstruction projects that promote social well-being, and consistent actions to improve public safety. All these objectives contribute to retaining the initiative in wide area security.

Mission Command

1-12. Mission command is the exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander's intent to empower agile and adaptive leaders in the conduct of unified land operations. (ADRP 6-0)

1-13. It is commander-led and blends the art of command and the science of control to integrate the warfighting functions to accomplish the mission. Mission command allows subordinates the greatest possible freedom of action.

Art of Command

1-14. Command is an art that depends on actions only humans can perform. It is a skill sharpened by experience, study, and observation. Commanding is more than simply leading Soldiers, units, and making decisions. Commanders strive to understand all aspects of the operational environment. They understand that operations affect and are affected by human interactions. Effective commanders must create a positive command climate that instills a sense of mutual trust throughout the command.

1-15. Authority refers to the right and power to judge, act, or command. It includes responsibility, accountability, and delegation.

1-16. Decision making refers to selecting the most favorable course of action (COA) to accomplish the mission. Commanders apply knowledge to the situation, thus translating their visualization into action.

1-17. Leadership refers to the process of influencing people by providing purpose, direction, and motivation, while operating to accomplish the mission and improve the organization. Commanders lead through a combination of personal example, persuasion, and compulsion. Through their decisions and actions, they serve as a role model to their units.

Science of Control

1-18. Control is the regulation of forces and warfighting functions to accomplish the mission in accordance with the commander's intent. Control is fundamental to directing operations. Commanders exercise control over forces in their area of operation (AO). Control is the process by which the commander follows up a decision and

minimizes deviation from his concept. It entails supervision of all aspects of the operation, including synchronization of all systems and activities.

1-19. The commander's mission command system, especially the staff, assists the commander with control. However, the commander remains the central figure.

1-20. Commanders use the science of control to manage information. Information must be relevant to mission command: accurate, timely, usable, complete, precise, and reliable. Relevant information fuels understanding and fosters initiative.

1-21. Commanders disseminate and share information among people, elements, and places. Communication is more than the simple transmission of information. It is a means to exercise control over forces. Effective commanders conduct face-to-face talks with their subordinates to ensure they fully understand and to receive feedback from them. Commanders use face-to-face communication to assess the mental and physical state of subordinates expressed in nonverbal means. Nonverbal means may include gestures, sighs, and body language. They may provide indictors on the effectiveness of the communication.

1-22. Organizational structure helps commanders exercise control. Structure refers to a defined organization that establishes relationships and guides interactions among elements. It includes procedures for coordinating among an organization's groups and activities. Structure is both internal (such as the organization of the command post) and external (such as the command and support relationships among subordinate forces).

1-23. A key aspect of mission command is determining the appropriate degree of control imposed on subordinates. The proper degree of control depends on each situation and is not easy to determine. Different operations and phases of operations require tighter or more relaxed control over subordinate elements than other phases require.

OPERATIONAL ENVIRONMENT

1-24. The operational environment is a composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander. (JP 3-0) Understanding the specific environment is essential to the successful execution of operations. As commanders better understand their operational environment (including the capabilities of their own and threat forces), they more skillfully employ and integrate their units' actions to create the conditions that lead to the desired end state.

OPERATIONAL AND MISSION VARIABLES

1-25. Army leaders plan, prepare, execute, and assess operations by analyzing the operational environment in terms of the operational variables and mission variables. The operational variables include political, military, economic, social, information, infrastructure, physical environment, and time. The memory aid for these variables is PMESII-PT. Included within these variables are the enemy, friendly, and neutral capabilities; and actions and interactions that are relevant to a specific operation. An operational environment is more than just military capabilities; it is a combination of the interrelated variables, or systems and the nodes that link them. (Refer to ADRP 5-0 for more information.)

THREAT

1-26. Although threats are a fundamental part of an operational environment for any operation, they are discussed separately here simply for emphasis. A threat is any combination of actors, entities, or forces that have the capability and intent to harm United States forces, United States national interests, or the homeland. (ADRP 3-0) Threats may include individuals, groups of individuals (organized or not organized), paramilitary or military forces, nation-states, or national alliances. Threats are sometimes categorized as traditional, irregular, disruptive, and catastrophic.

1-27. Our enemies combine different kinds of threats in regular and irregular patterns:

- Catastrophic challenges involving the use of weapons of mass destruction. Although their employment may be unlikely, the CAB must consider their use in every mission.

- Irregular challenges from enemies employing unconventional methods to counter the strengths of the CAB. In order to defeat the mutating methods of challengers, leaders must adapt to the operational environment more rapidly and more effectively than their opponents.
- Disruptive challenges from enemies who develop and use breakthrough technologies to negate U.S. advantages. One example is the disruption of the CAB's network-centric mission command systems.
- Traditional challenges posed by states employing recognized military capabilities and forces in well-understood forms of military competition and conflict. Traditional challengers will seek to adapt their capability as well.

CIVIL CONSIDERATIONS

1-28. Understanding the situation is not complete without considering and understanding the civil aspects of the AOs. Commanders and staffs visualize and analyze civil considerations in terms of relevant areas, structures, capabilities, organizations, people, and events (ASCOPE). At the CAB level, civil considerations generally focus on the immediate impact of civilians on military operations; however, they also consider larger, long-term diplomatic, economic, and information issues.

COMBAT POWER

1-29. Combat power is the total means of destructive, constructive, and information capabilities that a military unit/formation can apply at a given time. Army forces generate combat power by converting potential into effective action. Commanders conceptualize their capabilities in terms of combat power. Combat power has eight elements: leadership, information, mission command, movement and maneuver, intelligence, fires, sustainment, and protection. Commanders apply leadership and information throughout, multiplying the effects of the other six elements of combat power: mission command, movement and maneuver, intelligence, fires, sustainment, and protection, which are collectively known as warfighting functions.

LEADERSHIP

1-30. *Leadership* is the process of influencing people by providing purpose, direction, and motivation, while operating to accomplish the mission and improving the organization. (ADRP 6-22) An Army leader, by virtue of assumed role or assigned responsibility, inspires and influences people to accomplish the mission. Army leaders motivate people to pursue actions, focus thinking, and shape decisions for the greater good of the organization. They instill in Soldiers the Warrior Ethos, the indomitable spirit and will to win.

INFORMATION

1-31. Information is a powerful tool in the operational environment. In modern conflict, information has become nearly as important as lethal action in determining success or failure in operations at all levels. Every engagement, battle, and major operation requires complementary activities that inform and influence a global audience and affect morale within the operational area. Commanders use information to understand, visualize, describe, and direct the warfighting functions. They depend on data and information to increase the effectiveness of the warfighting functions.

1-32. Since information shapes the perceptions of the civilian population, it influences the operational environment. All parties in a conflict use information to convey their message to various audiences. These include enemy forces, adversaries, and neutral and friendly populations. Information is particularly critical in operations focused on stability tasks where the indigenous population and institutions are a major factor in success or failure.

WARFIGHTING FUNCTIONS

1-33. A *warfighting function* is a group of tasks and systems (people, organization, information, and processes) united by a common purpose that commanders use to accomplish missions and training objectives. (ADRP 3-0) All warfighting functions possess scalable capabilities to mass lethal and nonlethal effects. No warfighting function is exclusively decisive, shaping, or sustaining, but may contain elements of more than one type of operation.

Mission Command

1-34. The *mission command warfighting function* is the related tasks and systems that develop and integrate those activities enabling a commander to balance the art of command and the science of control in order to integrate the other warfighting functions. (ADRP 3-0) Mission command uses mission orders to ensure disciplined initiative within the commander's intent, enabling agile and adaptive commanders, leaders, and organizations.

1-35. The commander is the central figure in mission command. Mission command invokes the greatest possible freedom of action to subordinates, facilitating their abilities to develop the situation, adapt, and act decisively through disciplined initiative in dynamic conditions within the commander's intent.

Movement and Maneuver

1-36. The *movement and maneuver warfighting function* is the related tasks and systems that move and employ forces to achieve a position of relative advantage over the enemy and other threats. (ADRP 3-0) Direct fire is inherent in maneuver, as is close combat. The function includes tasks associated with force projection related to gaining a positional advantage over the enemy. Maneuver is the employment of forces in the operational area through movement in combination with fires to achieve a position of advantage in respect to the enemy to accomplish the mission. Maneuver is the means by which commanders mass effects of combat power to achieve surprise, shock, and momentum. Effective maneuver requires close coordination with fires. Movement is necessary to disperse and displace the force as a whole or in part when maneuvering.

Intelligence

1-37. The *intelligence warfighting function* is the related tasks and systems that facilitate understanding of the enemy, terrain, and civil considerations. (ADRP 3-0) The commander drives the intelligence warfighting function. Intelligence is more than just collection. It is a continuous process that involves analyzing information from all sources and conducting operations to develop the situation.

Fires

1-38. The *fires warfighting function* refers to related tasks and systems that provide collective and coordinated use of Army indirect fires, air and missile defense, and joint fires through the targeting process. (ADRP 3-0) It includes tasks associated with integrating and synchronizing the effects of these types of fires with the other warfighting functions.

Sustainment

1-39. The *sustainment warfighting function* refers to the related tasks and systems that provide support and services to ensure freedom of action, extend operational reach, and prolong endurance. (ADRP 3-0) The endurance of Army forces is primarily a function of their sustainment. Sustainment determines the depth and duration of Army operations. It is essential to retaining and exploiting the initiative. Sustainment is the provision of logistics, personnel services, and health services support needed to maintain operations until mission accomplishment.

Note. Sustainment includes health services and excludes force health protection, which is a component of the protection warfighting functions.

Protection

1-40. The *protection warfighting function* refers to the related tasks and systems that preserve the force so the commander can apply maximum combat power to accomplish the mission. (ADRP 3-0) Preserving the force includes protecting personnel (combatant and noncombatant) and physical assets of the U.S. and multinational military and civilian partners to include host nation. The protection warfighting function facilitates the commander's ability to maintain the forces' integrity and combat power. The protection warfighting function includes force health protection. Force health protection includes all measures to promote, improve, or conserve

the mental and physical well-being of Soldiers. These measures enable a healthy and fit force, prevent injury and illness, and protect the force from health hazards.

OPERATIONAL AREAS

1-41. Operational area is an overarching term that encompasses more descriptive terms for geographic areas in which forces conduct military operations. Areas of operations, influence, and interest are the operational areas used most often for CAB operations.

AREA OF OPERATIONS

1-42. A unit's AO is the geographical area assigned by a higher commander, including the airspace above, in which the unit commander has responsibility and the authority to conduct military operations.

1-43. AOs should allow the commander to employ his organic, assigned, and supporting systems to the limits of their capabilities. In an urban environment, this can pose a greater challenge than sparsely populated open operational areas. However, the CAB commander and his subordinates must prepare to use initiative and adaptability to effectively synchronize all their systems in multiple environments. The CAB commander will designate AOs for subordinate units, using control measures to describe each AO and designing them to fit the situation, while taking advantage of capabilities. Commanders specify the minimum control measures necessary to focus combat power, delineate responsibilities, assign geographic responsibility, and promote unified action. At a minimum, control measures include boundaries on all sides of the AO.

1-44. Subordinate AOs can be contiguous or noncontiguous. (See Figure 1-1.) When friendly forces are contiguous, a boundary, such as a road, or stream separates them. When friendly forces operate in a noncontiguous AO, the concept of operation links the elements of the force, but the AOs do not share a boundary. The unassigned area between noncontiguous AOs remains the responsibility of the higher headquarters.

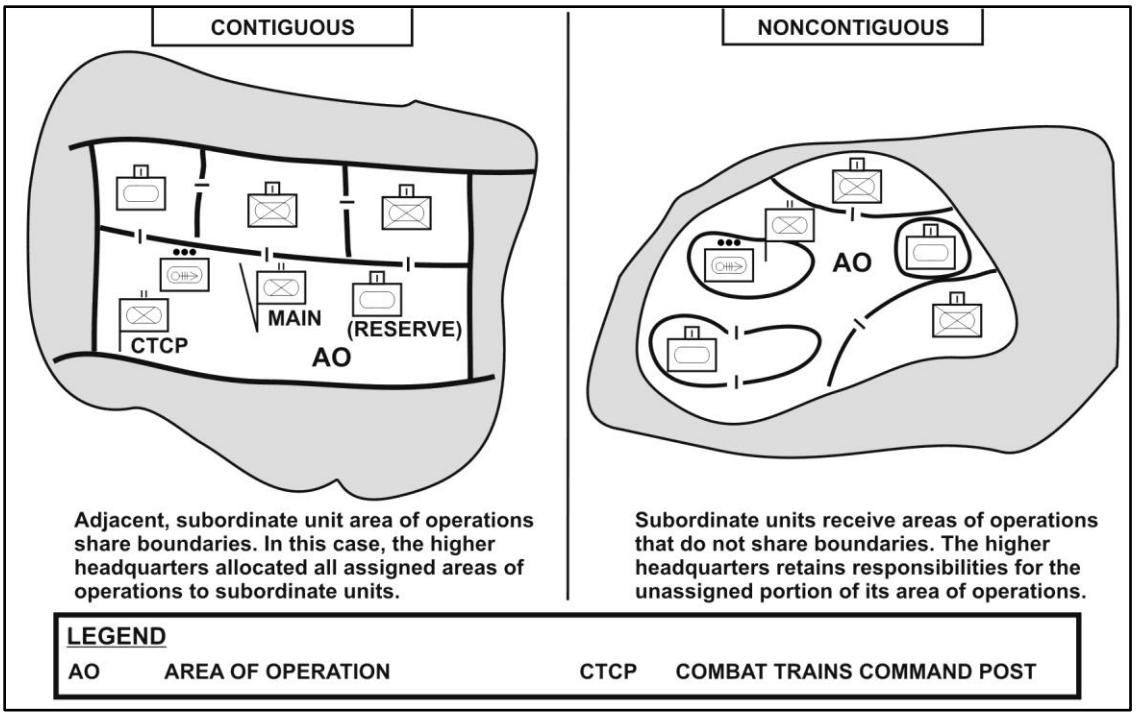

Figure 1-1. Contiguous versus noncontiguous areas

Area of Influence

1-45. The AO has an associated area of influence. An area of influence is a geographical area in which the commander can directly influence operations by maneuver or effects under his mission command. Areas of influence surround and include the associated AO.

Area of Interest

1-46. The CAB's area of interest (AOI) is a geographical representation of the area from which information and intelligence are required to execute successful tactical operations and to plan for future operations. It includes any threat forces or other characteristics of the CAB's operational environment that significantly influence accomplishment of the command's mission. The AOI can vary or change over time. A higher commander does not assign the AOI. The commander and his staff develop the AOI to help visualize the battlefield and their operational environment, and determine information requirements (IRs).

1-47. Figure 1-2 portrays one example of the interrelationship between the AO, AOI, and area of influence. Actions that the CAB takes within its AO can influence adjacent neighborhoods. Likewise, the actions of other units can have influence within the CAB's AO. The CAB's AOI includes the area of influence and focuses intelligence support (such as requests for information [RFIs]) for monitoring enemy and other activities that could affect the CAB's current and future operations.

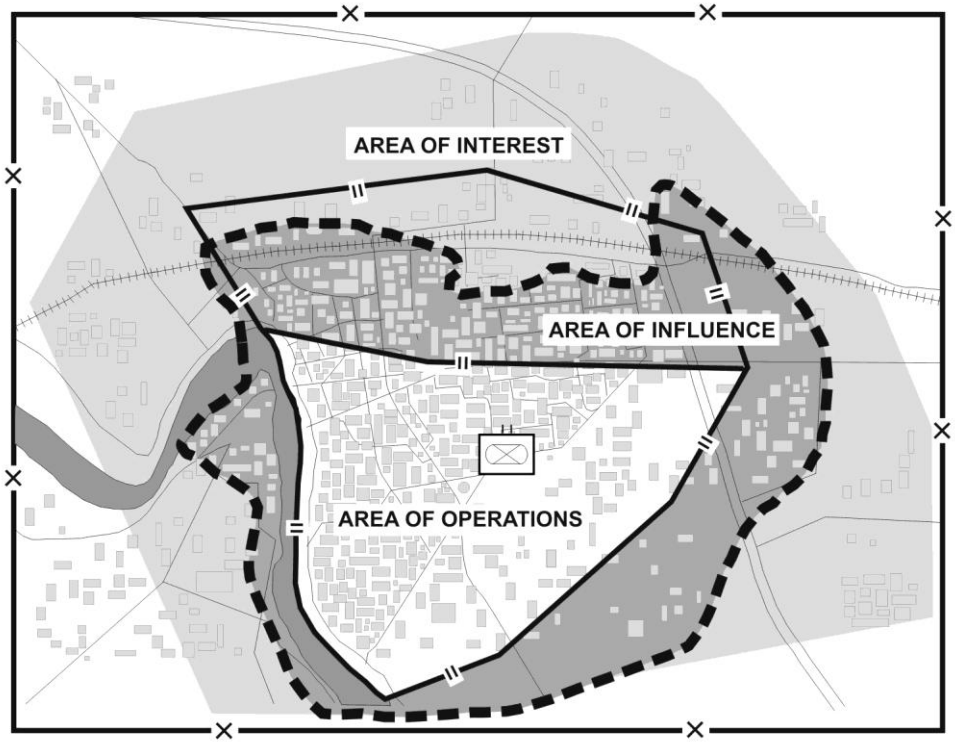

Figure 1-2. Area of operations, area of influence, and area of interest

DECISIVE-SHAPING-SUSTAINING FRAMEWORK

1-48. As commanders visualize their operational environment, they arrange their subordinate forces according to purpose, time, and space to accomplish a mission. This framework centers on decisive, shaping, and sustaining operations. Purpose unifies all elements of the task organization by providing the common focus for all actions. ADRP 3-0 states the decisive operation is an operation that directly accomplishes the mission; the shaping operation as an operation that establishes conditions for the decisive operation through effects on the enemy, other actors, and the terrain; and the sustaining operation is an operation at any echelon that enables the decisive operation or shaping operation by generating and maintaining combat power. (Refer to ADRP 3-0 for more information.)

MAIN EFFORT

1-49. The main effort is a designated subordinate unit whose mission at a given point in time is most critical to overall mission success. (ADRP 3-0) Designation of a main effort is a temporary resource allocation decision that the commander makes. Commanders weigh other priorities and needed resources. The main effort and the decisive operation are not always identical. Identification of the main effort in shaping operations is a resource decision. A shaping operation may be the main effort before execution of the decisive operation. However, the decisive operation becomes the main effort upon execution.

SECTION II – ROLE OF THE COMBINED ARMS BATTALION

1-50. The CAB is the ABCT's primary maneuver force. It is organized in a "2 by 2" design, consisting of two Armor companies and two mechanized Infantry companies. CABs are modular in design, combining Armor and mechanized Infantry companies, 18 squads of Infantrymen, organic reconnaissance (scouts), snipers, 120-mm mortars, a fires cell capable of employing supporting artillery and attack helicopters, and close air support. If required, the CAB receives engineer support from the ABCT's brigade engineer battalion (BEB) or brigade special troops battalion's (BSTB) engineer company or other engineer augmentation received by the ABCT.

MISSION

1-51. The CAB's mission is to close with the enemy by means of maneuver, to destroy or capture the enemy, repel the enemy's assault by fire, and engage in close combat and counterattack. The armor and weapons of the Abrams tank and Bradley fighting vehicle (BFV) provides optimal fire power, mobility, protection, and precision fires to conduct unified land operations in varied operational environments. The CAB is effective against enemy mechanized and armored forces, because the CAB offers the best protection and fire power of any of the Army's maneuver battalions.

1-52. Maneuver concentrates and disperses combat power to place and keep the enemy at a disadvantage. It achieves results that would otherwise be more costly. Effective maneuver keeps enemies off balance by making them confront new problems and new dangers faster than they can counter them. Maneuver is more than just fire and movement. It includes the dynamic, flexible application of all elements of combat power.

1-53. ABCTs and their CABs are designed for expeditionary deployment. CABs usually deploy by sea, although CAB equipment is prepositioned worldwide. This equipment is in unit sets and is stored both ashore and at sea.

JOINT, INTERAGENCY, AND MULTINATIONAL CONSIDERATIONS

1-54. CABs can expect to work with forces of other services to accomplish their assigned missions. Some examples of this may include the following:

- Fires from U.S. Air Force (USAF) systems create the conditions for decisive action and multiply the effects of tactical maneuver.
- Army and U.S. Marine Corps (USMC) forces are tactically interoperable. A USMC unit may replace an Army unit in an operation and vice versa. Typical USMC units that might task-organize with a CAB include light Armored reconnaissance companies equipped with light Armored vehicles and Infantry units.
- Special operations forces (SOF) provide complementary capabilities for tactical operations. Commands frequently task-organize military information support operations (MISO), and civil affairs (CA), with CABs.

1-55. Although not under military command, nonmilitary agencies are present in every military operation. The CAB must synchronize its military action with interagency and humanitarian organizations operating within the area of operation to facilitate the indigenous population and institutional support of U.S. military efforts in their country. Interagency cooperation is not easy. It might require the CAB commander to dedicate liaison personnel and to share military resources to achieve overall success.

1-56. Multinational operations is a collective term that describes military actions conducted by forces of two or more nations. Maintaining a good rapport and integrating military transition teams in unit operations helps

facilitate interoperability and command and control with foreign units. The CAB must articulate the commander's intent and concept of operations clearly and simply to avoid confusion that could result from differences in doctrine and terminology. The CAB commander and staff should plan to have longer planning sessions and more detailed rehearsals to develop a common understanding of the operations plan and control measures.

COMBINED ARMS BATTALION

1-57. CABs can be detached and attached to another BCT headquarters as needed. The division commander can attach a CAB to another ABCT to add weight to his main effort. Another option is for the commander to attach a CAB, to an IBCT, or to an SBCT to provide them additional firepower and protection. The CAB commander and staff must ensure the sustainment and communications requirements of mechanized forces are addressed when supporting another force.

1-58. Within the BCT, task organization is very flexible. (See Figure 1-3.) For example, a CAB can detach a company to reinforce the Cavalry squadron in order to support a particular mission. CABs can perform most shaping operations, hasty defenses, convoy security, and stability tasks without reinforcement. For example, when one CAB executes the ABCT decisive operation, the other CAB may provide a company to reinforce it. Company teams of task-organized Infantry and Armor platoons are formed based on mission variables.

1-59. CABs are organized to fight and win, but they are equally capable of executing stability and defense support of civil authority tasks as part of a joint task force. The CAB combines the efforts of its headquarters, mechanized Infantry, and Armor companies to execute tactical missions as part of an ABCT operation. Amassing the combat power of these companies quickly while integrating and synchronizing the supporting and sustaining multipliers, is the key to victory.

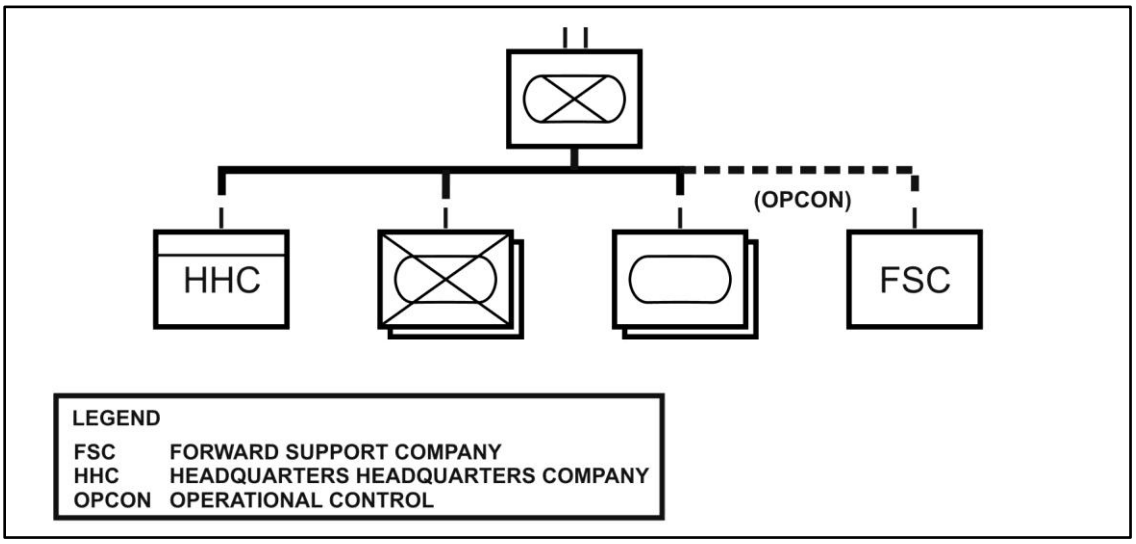

Figure 1-3. The combined arms battalion

1-60. The CAB commander usually organizes his companies as teams with a mix of Armor and Infantry units to accomplish the battalion's mission. The company team is an organization whose effectiveness increases with synergy of its subordinate elements, including tanks, BFVs, Infantry, and support elements. These components have a broad array of capabilities; individually, however, they also have a number of vulnerabilities. Effective application of the company team as a combined arms force can capitalize on the strengths of the teams' elements while minimizing their respective limitations.

MECHANIZED INFANTRY COMPANY

1-61. The mission of the mechanized Infantry company is to close with the enemy by means of maneuver, to destroy or capture the enemy, repel the enemy's assault by fire, and engage in close combat and counterattack. The company maneuvers in all types of terrain and climatic and visibility conditions. It capitalizes on all forms

of mobility, to include helicopters and tactical airlift. The inherent versatility of Infantry also makes it well suited for employment against asymmetrical threats across decisive actions. Figure 1-4 illustrates the organization of a mechanized Infantry company.

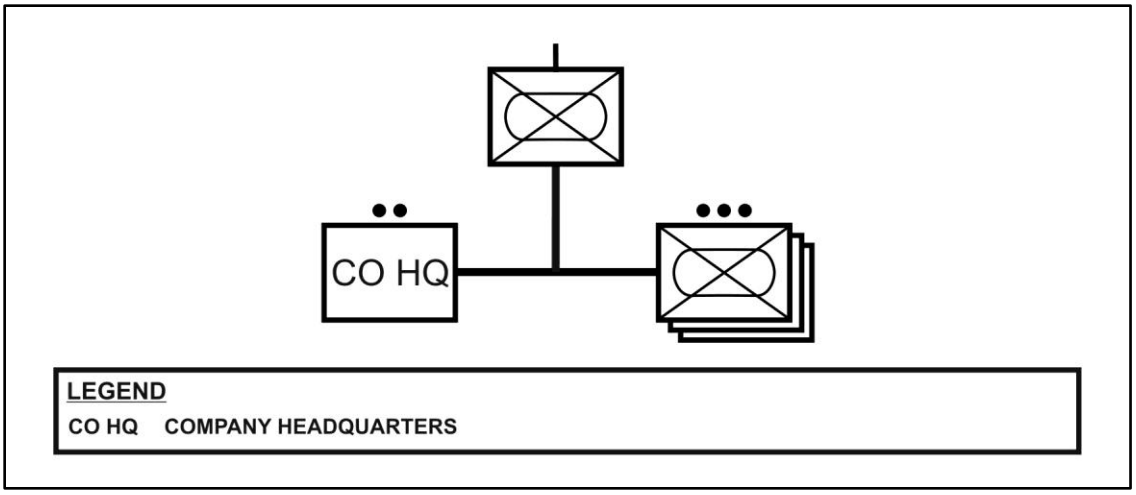

Figure 1-4. Mechanized Infantry company

1-62. The mechanized Infantry company is equipped with the BFV. The BFV provides the company the ability to assault rapidly through small arms and indirect fires to deliver the Infantry squads to an objective or critical point and continue the assault dismounted while being supported by the firepower of the BFV. (Refer to ATP 3-90.1 for more information.)

1-63. The BFV is an integral part of the combat power of the rifle platoon and the rifle company. The BFV-equipped Infantry platoons fight as a team, with fully integrated vehicular and dismounted elements. The dismounts provide the CAB a mutually supporting force capable of offsetting the vulnerabilities of the CAB's mounted elements.

ARMOR COMPANY

1-64. The mission of the Armor company is to close with the enemy by means of fire and maneuver to destroy the enemy, repel the enemy's assault by fire, and engage in counterattack. The company maneuvers in all types of terrain, weather, and visibility conditions. It capitalizes on long-range, direct fire combat with enemy mechanized or Armored units in open terrain with speed and shock effect. Figure 1-5 illustrates the organization of an Armor company.

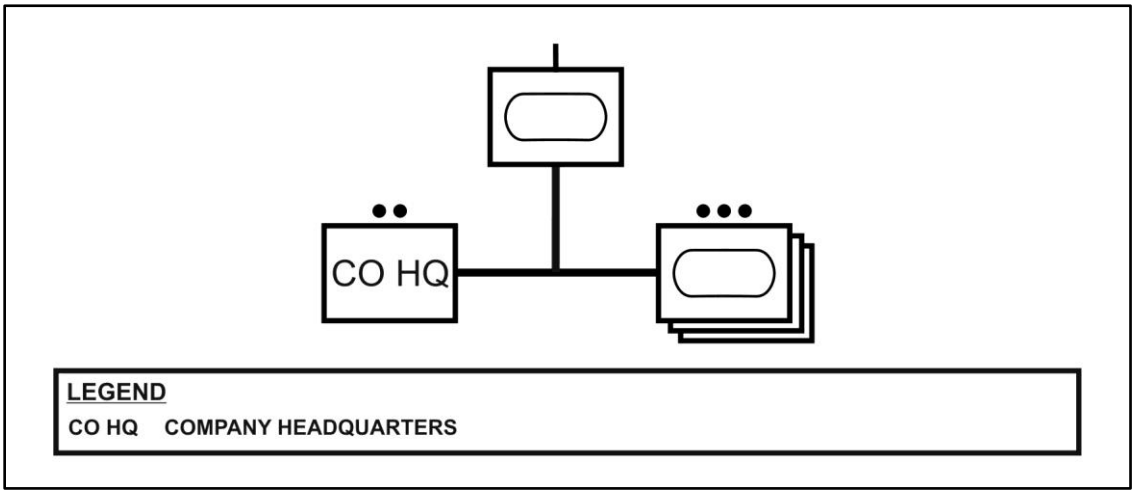

Figure 1-5. Armor company

HEADQUARTERS AND HEADQUARTERS COMPANY

1-65. The headquarters company consists of the headquarters and headquarters company (HHC); the battalion's scout, mortar, and medical platoons; and the communications and sniper section. The headquarters company provides reconnaissance, sniper, mortar, communication, supply, administration, and medical support for battalion. The FSC in direct support of the CAB provides most sustainment to the battalion. (See Figure 1-3.) The responsibilities of the command and staff sections are discussed throughout this ATP.

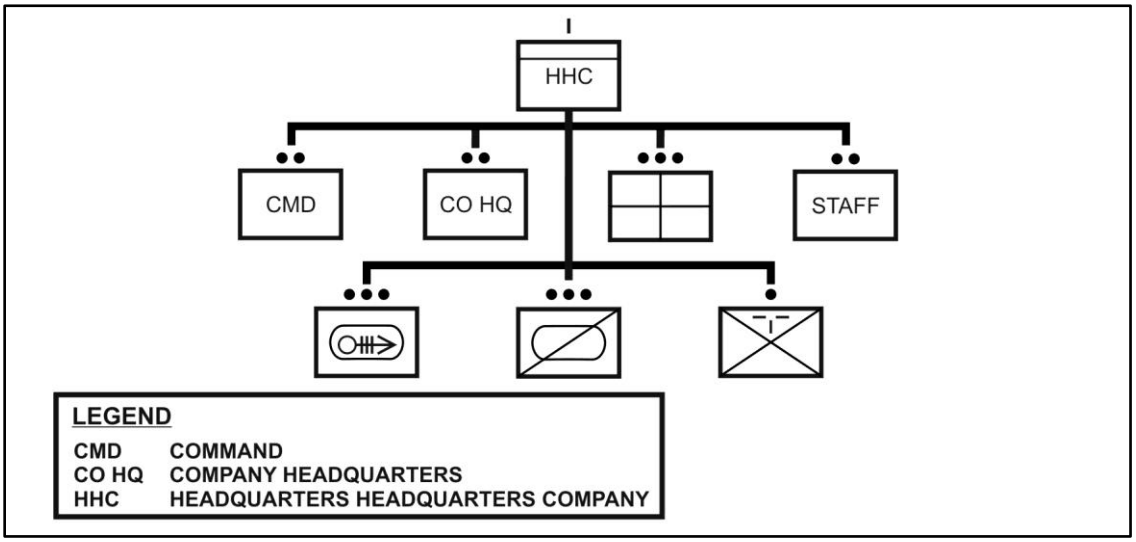

Figure 1-6. Headquarters and headquarters company

COMPANY HEADQUARTERS

1-66. The company headquarters section provides the immediate leadership, supply, and human resources support to all HHC personnel, including the CAB's command group, coordinating, special and personal staff, and specialty platoons and squads. (See Figure 1-6.) It includes the HHC commander, first sergeant (1SG), executive officer (XO), supporting supply and chemical, biological, radiological, and nuclear (CBRN) sections. In a tactical environment, the HHC headquarters section provides flexibility to the CAB commander. The HHC commander, 1SG, and XO do not have a set location from where they conduct their duties and as such, can be placed where they can most effectively help the battalion to execute the mission.

1-67. The HHC commander is responsible for coordinating sustainment support from the FSC. The HHC 1SG coordinates and supervises resupply of the scout and mortar platoons, the main command post (CP), combat trains, and attached support units. Generally, the HHC 1SG operates out of the combat trains.

1-68. If the CAB organizes a field trains command post (FTCP), the HHC commander is generally the officer in charge (OIC). The FTCP is usually the coordination and control center for the human resources staff officer's (S-1) personnel and administration center, company supply sections, and FSC. The HHC commander generally focuses on CP operations while the FSC commander commands his company and coordinates all sustainment requirements for the CAB. When trains are echeloned, the HHC commander usually is responsible for securing the field trains and the logistics staff officer (S-4) is responsible for securing the combat trains.

1-69. Depending upon his higher headquarters' organization, the HHC commander receives direction and guidance from the CAB commander, headquarters staff officers, and from commanders of other units. To be effective, the HHC commander must understand not only the breadth of his authority and responsibility, but also his relationship with, and the role and function of, every leader with whom he interacts.

SCOUT PLATOON

1-70. The scout platoon conducts reconnaissance and security in support of the battalion mission. The scout platoon leader advises the CAB commander, intelligence staff officer (S-2), and operations staff officer (S-3) on employing the scout platoon. The platoon also assists in controlling battalion movements but rarely conducts

independent platoon-level offensive, defensive, or retrograde tasks. The scout platoon helps the commander plan and execute operations by providing relevant operational information in a timely fashion during the planning, preparation and execution of a mission. (Refer to ATP 3-20.98 for more information.)

1-71. Often the scout platoon receives augmentation to perform specialized reconnaissance. This may include engineer teams to gather obstacle intelligence (OBSTINTEL) or conduct bridge and route classification, for the CBRN teams to locate hazards, and sniper teams to perform extended surveillance missions.

1-72. The CAB commander is responsible for the employment of the scout platoon, since it is the commander's primary source of information. The scout platoon leader must stay in contact with either the commander or the CAB CP. This is necessary if the platoon leader is to keep his platoon informed of the next higher commander's most current friendly and threat situations. He must also ensure that information gained by the platoon is transmitted higher, to include personnel status and logistics reports to the HHC commander.

SNIPER SQUAD

1-73. Battalion snipers are employed to support maneuver, to kill essential enemy leadership or command personnel, to disable lightly armored or "thin skinned" vehicles, to enhance force protection, to provide lethal accurate fires in urban operations, to protect tanks from antiarmor fire, and to perform counter-sniper operations. During security missions and stability tasks with extremely restrictive rules of engagement (ROE), sniper teams are used extensively in the countersniper role as a means of providing force protection without creating unwarranted collateral damage.

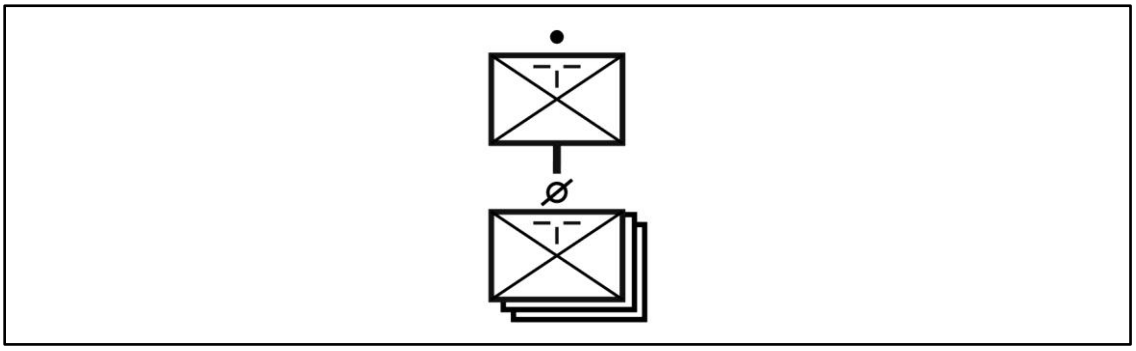

Figure 1-7. Sniper squad

1-74. The battalion sniper squad consists of a squad leader and three similarly equipped three-man sniper teams. (See Figure 1-7.) Each team is capable of providing the battalion with a full range of sniper support and is equipped with both the M110 7.62-mm sniper rifle (providing antipersonnel fires out to 1000 meters) and the .50-caliber M107 sniper rifle (providing antipersonnel and antiequipment up to 1800 meters). The squad also utilizes the M210 Enhanced Sniper Rifle to the snipers "arms room." The M210 is a bolt action, magazine-fed, precision 300 Winchester Magnum cartridge, direct line-of-sight weapon system capable of hitting personnel-size targets at ranges of 1200 meters or further. This "arms room" enables the sniper team to employ the sniper system that best supports the mission parameters. Additionally, the third member of the sniper team is equipped with an M203 or M320 rifle system to provide protection and security for the sniper and his spotter as well as a means to break contact if the team is compromised.

1-75. The sniper teams directly support the battalion direct fire priorities as established by the commander and S-3. The modularity of the sniper teams enables the augmentation of a sniper team to a subordinate company for the execution of specific sniper missions. The support of the snipers is the responsibility of the HHC commander unless the snipers are attached to another commander. (Refer to TC 3-22.10 for more information.)

MORTAR PLATOON

1-76. Mortars are suppressive, high-angle, indirect fire weapons that are organic to the battalion. They can be employed to neutralize or destroy area or point targets, screen large areas with obscurants, and provide

illumination or coordinated high-explosive illumination. The mortar platoon's mission is to provide immediate and close indirect fire support for maneuver battalions.

1-77. The mortar platoon consists of four squads with one 120-mm mortar each and a fire direction center (FDC). (See Figure 1-8.) The mortars can fire as a platoon or by sections under the direct control of the FDC. The M121 mortar is capable of firing sixteen rounds per minute for the first minute with a sustained rate of fire of four rounds per minute after the first minute. It is capable of firing high explosives, illumination, and smoke rounds.

1-78. The platoon can deploy as one platoon or in two-gun sections. Mortars rarely are deployed as separate squads. If deployed as sections, one vehicle configures its Mortar Fire Control System as an FDC and controls the second vehicle's fires. This is possible even if the digital link to Advanced Field Artillery Tactical Data System (AFATDS) is lost.

1-79. The CAB mortar platoon provides the commander with the following:

- Supporting fire that is immediately at hand and close to the company and CAB fight. The mortar platoon is aware of the local situation and ready to respond quickly without lengthy coordination.
- Unique plunging fires that complement, but do not replace, the heavier fires of supporting field artillery, close air support, and naval gunfire.
- Weapons whose high rate of fire and lethality fill the gap between the field artillery fires' shift to deeper targets and the assault elements' closing onto the objective.
- A solid base of fire upon which to anchor his maneuver against the critical point of enemy weakness.
- Suppressing the enemy inhibits his fire and movement while allowing friendly forces to gain a tactical mobility advantage. In the company- and battalion-level battle, mortar fire acts both as a killer of enemy forces and as an enhancer of friendly mobility.

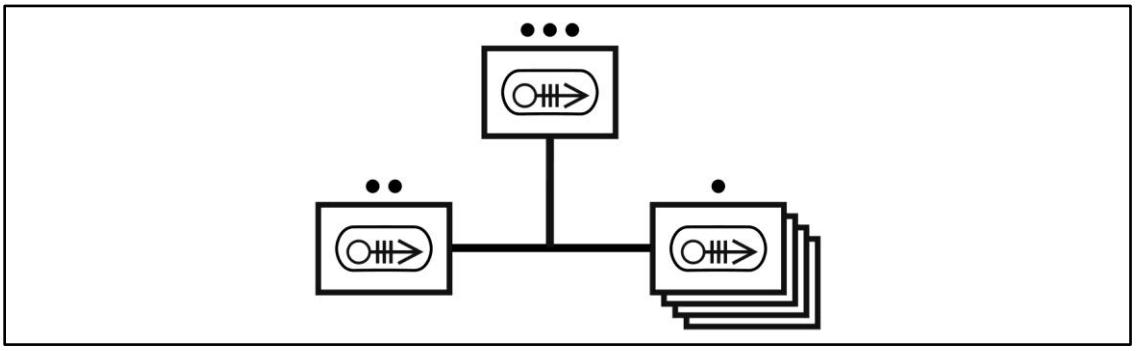

Figure 1-8. The mortar platoon

1-80. Ultimately, the CAB commander is responsible for the tactical employment of his mortar platoon. However, the S-3 generally has the authority to direct the platoon to accomplish specific missions or tasks within the framework of the commander's intent. The mortar platoon leader works closely with the fire support officer (FSO) to ensure mortar fires are planned on appropriate targets, and are delivered at the correct times.

1-81. It is important to integrate mortars into battalion-level training, so they are familiar with the personnel and systems they must operate with. One example is to have Soldiers use the AFATDS to send digital missions to the Mortar Fire Control System. The mortar platoon leader must practice his role in the MDMP process by coordinating with CAB operations and fires cell. Within HHC, the scouts and mortar platoon can train on call for fire, which improves both of their skills.

1-82. The HHC commander is a vital link in the chain of command between the CAB commander and the mortar platoon leader. He exercises mission command of the mortar platoon, but not operational control (OPCON) during actual maneuver or combat. The HHC commander and the mortar platoon leader routinely exchange information. The HHC commander provides administrative and logistical support to the platoon, while the mortar platoon leader reports the status of assigned personnel and equipment to the company commander.

MINE ROLLER SECTION

1-83. The CAB has countermine-team capabilities with mine-clearing blades and rollers. Mine-roller technology provides protection from improvised explosive devices. Blades and rollers are assigned to the headquarters company. Commanders often distribute the blades and rollers to Armor companies to integrate into training and conduct battle drills.

MEDICAL PLATOON

1-84. The medical platoon provides Army Health System (AHS) support through its health service support (HSS) and force health protection (FHP) missions in support of the CAB. The medical platoon is organized with a headquarters section, a treatment squad, a combat medic section, and four ambulance squads (two ambulances each). (See Figure 1-9.)

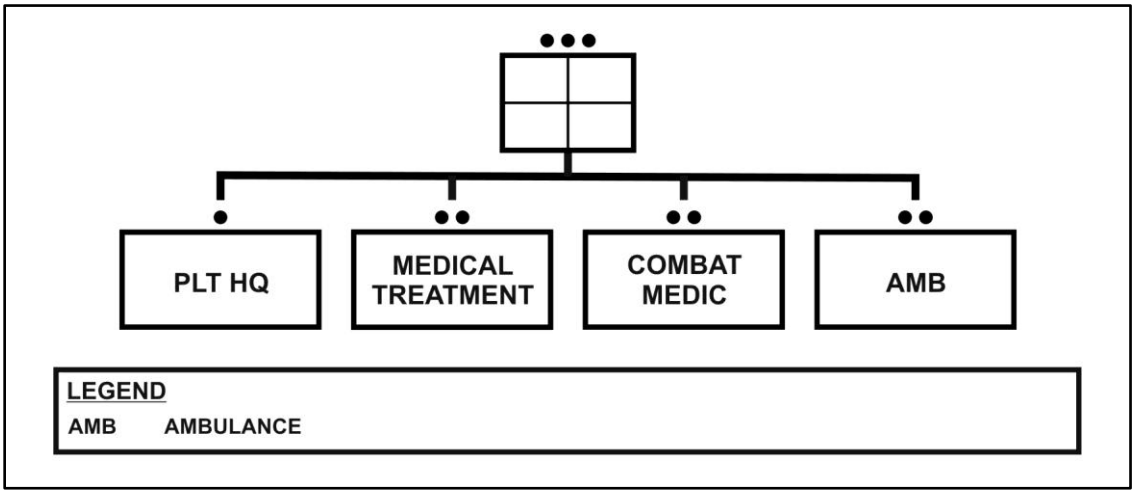

Figure 1-9. Medical treatment platoon

Health Service Support

1-85. Health service support (HSS) consists of support and services to promote, improve, conserve, or restore the mental and physical well-being of Soldiers. The medical platoon's HSS responsibilities include:

- Providing Role 1 medical care. This includes emergency medical treatment for wounds, injuries, or illnesses; advanced trauma management; casualty collection; sick call services; Class VIII resupply; and medical evacuation from either point of injury or supported maneuver company to the battalion aid station [BAS] or the supporting treatment team.
- Establishing and operating the BAS where it can support CAB operations best.
- Providing training for combat lifesavers (CLS). This includes recertifying CLS personnel every 12 months to ensure their skill proficiency remains in accordance with Army Regulation (AR) 350-1.
- Allocating combat medics to mechanized Infantry companies (one per platoon and a senior health care sergeant and ambulance team for each company) and Armored units (one health care sergeant and, one ambulance team per company).
- Placing ambulances forward with supported maneuver companies to reduce evacuation time and to augment maneuver company medical treatment, as required.
- Maintaining field medical records in accordance with AR 40-66.

Force Health Protection

1-86. FHP consists of measures to promote, improve, or conserve the mental and physical well-being of Soldiers. These measures enable a healthy and fit force, prevent injury and illness, and protect the force from health hazards. The medical platoon's FHP responsibilities include:

- Implementing FHP operations to counter health threats and prevent disease and nonbattle injury. (Refer to FM 4-02.17 for more information.)
- Planning for and accomplishing predeployment and post deployment health assessments.
- Establishing and executing a medical surveillance program. (Refer to AR 40-5, AR 40-66, and FM 4-02.17 for more information.)
- Coordinating occupational environmental health surveillance programs.
- Establishing a combat and operational stress control program for the CAB.
- Assisting with the training of field sanitation teams.
- Conducting sanitation inspections of troop living areas, food service areas, waste disposal locations, and potable water distribution points/equipment.

ATTACHMENTS

1-87. CABs can be attached to another BCT headquarters as needed; however, unit esprit and cohesion are powerful multipliers and should be considered when task-organizing the CAB. Within the ABCT, task organization is very flexible. For example, a CAB may detach a company team to reinforce the BSTB when the threat to the ABCT base elements exceeds their self-defense capability.

1-88. The FSCs are normally organic to the BCT BSBs and are critical to the success of the logistic concept of support. How the FSCs are deployed is critical to the success of the BCT The BCT usually provides each CAB a FSC in an OPCON relationship from the brigade support battalion (BSB). The FSC commander is responsible for executing the sustainment plan in accordance with the CAB commander's guidance. The BSB provides technical oversight to the FSC. (Refer to FM 4-90 for more information.) Employment of the FSC is discussed in Chapter 8.

1-89. The BCT may provide the following assets to CABs in the course of decisive actions:

- Information collection assets from the Cavalry squadron and the military intelligence company.
- A variety of engineer assets from the ABCT BEB or BSTB's engineer company or augmenting engineer assets.
- Engineer teams from the BEB or BSTB's engineer company to facilitate reconnaissance missions.
- Human intelligence (HUMINT) support.
- Translator support.
- MISO along with other CA support from CA units.
- Electronic warfare (EW) support.
- Liaison officers (LNOs) or provincial reconstruction teams to assist with host-nation interaction.
- Military police (MP) and military working dog teams.
- Public affairs element to facilitate media operations.
- Explosive ordnance disposal (EOD) team for unexploded ordnance.

CAPABILITIES

1-90. The CAB is optimized for high-tempo offensive as well as defensive tasks against conventional and unconventional forces in mixed and open terrain. It is capable of screen missions, and most stability tasks, with the possible exception of stability tasks in mountainous or jungle environments.

1-91. When a CAB executes decisive actions, it usually is reinforced with combined arms enablers such as engineers, artillery, and aviation. Reinforcing lethal and suppressive effects from a variety of sources provides additional fire support. CABs can perform most shaping operations, hasty defenses, and convoy security without reinforcement. CABs apply their combat power to—

- Conduct sustained operations in all operational environments with proper augmentation and support.
- Conduct offensive tasks.
- Conduct defensive tasks.
- Accomplish rapid movement and limited penetrations.
- Exploit success and pursue a defeated enemy as part of a larger formation.

- Conduct guard operations when augmented with artillery and aviation support.
- Conduct operations with Infantry and Stryker maneuver forces.

1-92. CABs can perform many tasks associated with stability tasks and defense support to civil authorities, but will likely receive reinforcement from civil affairs or other specialized units. CABs have the capability to—

- Protect the local populace from external and internal threats.
- Provide most essential services (such as emergency medical care and rescue, food and water, and emergency shelter).
- Support internal security efforts (such as traffic checkpoints, contraband searches, and detainment of suspected criminals).
- Provide training to host-nation security forces and police.
- Coordinate with local officials/elders to fund limited projects using a commander's emergency response program.

LIMITIATIONS

1-93. The CAB requires significant amounts of strategic transportation to reach a theater of operations. There are limited sets of CAB equipment in Army prepositioned stocks afloat and ashore. Once a CAB deploys, or draws its equipment and supplies, it still requires time for RSOI.

1-94. The CAB's operational limitations include:

- Restricted mobility and firepower in urban areas, dense jungles, forests, very steep and rugged terrain, and significant water obstacles.
- Vulnerability to EW due to high dependence on radio and satellite communications (SATCOM).
- High usage rate of consumable supplies, particularly Classes III, V, and IX.
- Vulnerability to mines and antitank weapons.
- Footprint is larger than a lighter force.
- No organic gap crossing capability.
- Need for a secure ground line of communication (to deliver supplies).

SECTION III – OPERATIONS PROCESS

1-95. The commander's intent focuses the operations process. This process (planning, preparation, execution, and continuous assessment) is described in detail in ADRP 5-0. Although planning, preparing, executing, and assessing occur continuously in operations, they need not occur sequentially. The CAB must prepare to perform all four actions simultaneously, and the commander's intent is at the center of the process.

COMMANDER'S INTENT

1-96. The commander's visualization is the mental process of developing situational understanding, determining a desired end state, and envisioning how the force will achieve that end state. Commanders summarize their visualization in their intent statement. The commander's intent is a clear and concise expression of the purpose of the operation and the desired military end state that supports mission command, provides focus to the staff, and helps subordinate and supporting commanders act to achieve the commander's desired results without further orders, even when the operation does not unfold as planned. (Refer to ADRP 3-0 for more information.) Because the enemy can be unpredictable, and not constrained to friendly parameters, the commander's intent should allow subordinate leaders to exercise their initiative in the face of adverse tactical situations.

1-97. The CAB commander relies on his professional training and tactical experience to develop his intent. Of all the activities required of a CAB commander, visualizing an operation from start to finish and describing that visualization to his staff and company commanders, are the most critical. When possible, the commander delivers his intent personally. Face-to-face delivery ensures mutual understanding of what the commander wants by allowing immediate clarification of specific points. The CAB commander's intent can be summarized as—

- The purpose of the operation (the why).
- What key tasks the CAB must accomplish.
- The end state.

1-98. The commander's intent is critical to mission accomplishment. The military designs and executes its operations around the commander's intent:

- The commander develops his intent and concept of the operation within the framework of his higher commander's intent.
- During planning, the commander's intent drives the MDMP.
- Subordinates use the commander's intent to decide what to do when facing unforeseen opportunities and threats, and in situations where the concept of operations no longer applies.
- During execution, staffs work within the commander's intent to direct units and control resource allocations.

MILITARY DECISION-MAKING PROCESS

1-99. The commander and staff use the MDMP to develop plans and orders. (Refer to ADRP 5-0 for more information.) The MDMP is not a stand-alone process; it is synchronized with several other processes. These other processes do not occur at distinct points within the MDMP. They may occur before, during, or after the MDMP. At the CAB level, the processes and their products that support MDMP can include:

- Intelligence preparation of the battlefield.
- Targeting. (Refer to FM 3-60 for more information.)
- Risk management. (Refer to ATP 5-19 for more information.)
- Information collection. (Refer to Chapter 2 for more information.)

1-100. Although commanders at all levels are expected to be involved in the MDMP, the CAB commander should ensure that his intent (that is visualization) is clear to his subordinates during the entire operations process. The CAB commander and staff should ensure all officers and NCOs are trained on the MDMP process and its products to enhance their planning capabilities.

1-101. Throughout the operations process, the CAB staff analyzes the current situation in terms of METT-TC and prepares their running estimates. A running estimate is a staff section's continuous assessment of current and future operations. The running estimate enables the staff to determine if the current operation is proceeding according to the commander's intent and if future operations are supportable. (ADRP 5-0) An effective running estimate relies on accurate and continuous reporting from individuals and units in order for the staff to update running estimates and make adjustments to the operation as necessary. Generally, the CAB commander empowers his staff to make adjustments within their areas of expertise. When a decision is outside their authority, staff officers present the situation to those delegated the authority to act (for example, the S-3 or XO) or to the commander.

1-102. Thinking in terms of desired and undesired effects helps commanders throughout the operations process. Desired effects are results that support accomplishment of the mission. Undesired effects could adversely affect accomplishment of the mission. The commander and staff examine ways to achieve desired effects best, while mitigating undesired effects. By integrating risk management processes throughout MDMP, the commander and his staff mitigate environmental and collateral damage. The commander and staff use control measures to minimize civilian casualties and damage to infrastructure and the natural environment while ensuring the mission accomplishment. Regardless of the situation, the commander and staff are expected to make values-based decisions that are ethical and effective.

MILITARY DECISION-MAKING PROCESS IN TIME-CONSTRAINED ENVIRONMENTS

1-103. In time-constrained environments, the staff might not be able to conduct a detailed MDMP, and might choose to abbreviate the process using parallel and collaborative planning as described in ADRP 5-0. The abbreviated process uses all seven steps of the MDMP, but the steps are done in a shortened and less detailed manner.

Parallel Planning

1-104. The CAB staff does not wait for the BCT OPORD before beginning the MDMP. The CAB's MDMP usually begins with a BCT warning order (WARNORD). However, a change in the situation, anticipation of an order from the BCT, or changed CCIR can lead the commander to begin planning, and to base this planning on the apparent changes. This is referred to as parallel planning. It is accomplished by issuing warning orders to subordinate units at various stages of the MDMP. Parallel planning depends on distributing information as it is received or developed.

Collaborative Planning

1-105. Collaborative planning is the real-time interaction among commanders and staffs at two or more echelons developing plans for a particular operation. This can be collaboration between the BCT and CAB or the CAB and its companies. One example could be a CAB conducting collaborative planning for a cordon and search. The responsible company knows its AO better, so it can recommend the necessary terrain information (such as routes and civilian locations), and timing for the operation. This allows the company to begin planning earlier and with more accurate information, while the CAB focuses on integrating other warfighting functions into the concept of the operation.

Distributed Planning

1-106. Digital communications and information systems enable members of the CAB staff to execute the MDMP without being collocated. Distributed planning saves time and increases the accuracy of available information through the use of rapid voice and data transmissions that the CAB can use throughout the AO, including the command group, main CP, combat trains command post (CTCP), and field trains command post (FTCP).

Fragmentary Orders

1-107. The commander often bases fragmentary order (FRAGORD). on newly acquired intelligence. Predictive intelligence provides commanders and Soldiers with a high level of shared situational understanding (SU), delivered with the speed, accuracy and timeliness necessary to operate at their highest potential and conduct successful operations. Often the CAB XO/S-3, acting within the commander's intent, issues a FRAGORD to take advantage of the new information. The FRAGORD ensures that all subordinates and subordinate units stay synchronized. Synchronization involves more than arranging military actions; it requires unity of effort throughout the force.

Nested Concepts

1-108. As the CAB completes MDMP and prepares the necessary orders, each subordinate unit must understand how the purpose of its assigned tasks has been incorporated, or "nested" into the CAB's operation. Nested concepts, however, are more than links between a subordinate unit's task and purpose, and the CAB main effort's task and purpose. Nested concepts include the integration of all the warfighting functions (for example, mission command, movement and maneuver, intelligence, fires, sustainment, and protection during the course-of-action development process).

TROOP LEADING PROCEDURES

1-109. Troop leading procedures (TLP) is a dynamic process used by small unit leaders to analyze a mission, develop a plan, and prepare for an operation. The MDMP and TLP are similar, but not identical. The type, amount, and timeliness of the information that the CAB passes to the companies and the scout platoon directly influence these subordinates' TLP. (Refer to ADRP 5-0 and FM 6-0 for more information.)

PREPARING FOR OPERATIONS

1-110. During preparation, the CAB commander continues to drive mission command and the operation process through understanding, visualizing, describing, directing leading, and assessing the information and intelligence provided to him through his staff from higher and subordinate echelons. Preparation takes place any

time the CAB is not executing. Ideally, preparation begins with the receipt of an order (as does planning) and ends as execution begins. Preparations for major operations include information collection tasks, plan refinement, rehearsals, coordination, inspections, and movement.

INFORMATION COLLECTION

1-111. The commander tasks reconnaissance, security, surveillance, and intelligence operations to collect and protect information during all operations to plan, organize, and execute shaping operations that answer the CCIRs and support the decisive operation. Information collection begins during planning to fill any IRs that were identified during mission analysis. IRs are those information elements necessary to address the factors of METT-TC. Those IR identified by the commander as being critical to facilitating timely decision making are the CCIRs. (ADRP 5-0) During MDMP, the commander decides whether to designate an IR as a CCIR based on his likely decisions and his visualization operation. The staff develops an initial information collection plan focused on the intelligence gaps identified during mission analysis.

1-112. This initial information collection plan should answer the IR needed to develop effective plans. The initial information collection plan can be issued as part of a WARNORD, a FRAGORD, or an OPORD.

1-113. During preparation, the CAB commander receives answers to some of his IR, and improves his situational awareness through his available information collection assets (such as scout platoon, unmanned aerial system [UAS], requested brigade assets, and so forth). The CAB plans and executes reconnaissance, security, surveillance, and intelligence tasks with the same level of importance as any operation. As the scout platoon (or another available information collection asset) gathers information (answering IR), the information collection plan is modified to account for new IR or approved CCIR, and efforts to collect additional information are redirected. The S-3 usually updates the information collection plan with FRAGORDs.

1-114. The commander and staff continuously review IPB products against the current situation. The commander (or S-3) redirects the scout platoon or other information collection assets to focus on the most important unknowns remaining, while emphasizing the current CCIR. (Refer to FM 3-55 for more information.) When determining his need for information, the CAB commander must take several factors into consideration:

- The ability of the scout platoon to gather the needed information.
- The risk to the scout platoon during collection.
- The specialized augmentation necessary for the scout platoon to perform its role in the time allotted and the degree of detail required.
- The ability to sustain the scout platoon over time and distance.
- The requirement to have the scout platoon available at critical times and places to support the decisive action.
- The availability (time, type, and quantity) of other information collection assets.

INFORMATION OPERATIONS

1-115. Information operations integrate the employment, during military operations, of information-related capabilities in concert with other lines of operation to influence, disrupt, corrupt, or usurp the decision-making of adversaries and potential adversaries while protecting our own. Units want the civilian population in their area of operations to be neutral, or in favor of their activities. Leader engagements at all levels are the key to influencing the local populace perception of U.S. presence.

REHEARSALS

1-116. Rehearsals are the commander's tool for ensuring that staffs and subordinates understand the commander's intent and concept of operations. Rehearsals focus on synchronization and coordination. Each of the four types of rehearsals achieve a different result and have a specific place in the preparation time line. (Refer to FM 6-0 for more information.)

EXECUTING OPERATIONS

1-117. The commander's intent and mission orders focus every level of the CAB on executing the concept of operations. During execution, ensure the commander has the information he needs to assess the operation. The CAB main CP conducts battle tracking, which involves monitoring all reports to identify information in order to keep the subordinate units and warfighting functions synchronized. The commander and staff assess the probable outcomes of the ongoing operation to determine whether adjustments are required to accomplish the mission, to anticipate unforeseen enemy actions, or to take advantage of unexpected opportunities.

1-118. When the operation is progressing satisfactorily, critical ongoing functions must occur. These include:

- Focus all assets on the decisive operation.
- Conduct continuous information collection and target acquisition.
- Conduct security operations.
- Adjust CCIRs and IRs based on the situation.
- Perform clearance of fires.
- Evacuation of casualties.
- Facilitate assured mobility.
- Adjust graphic control measures.
- Employ airspace control measures.
- Continue liaison and coordination.
- Maintain communications architecture.
- Conduct the targeting process.
- Manage movement and positioning of sustainment units.
- Perform terrain management.

1-119. If the operation does not proceed as planned, and adjustments and synchronization are not leading to mission accomplishment, the staff conducts a quick meeting or huddle to develop alternate courses of action (COAs). In most cases, the XO (or S-3) conducts a mental wargame to validate the COAs. The commander then decides on a COA and the staff implements the decision. The most important staff actions are resynchronizing the warfighting functions and disseminating changes to control measures.

1-120. The commander organizes his staff into CPs that provide staff expertise, communications and information systems that work in concert to aid the commander in planning and controlling operations. All CPs have the responsibility to conduct the five basic functions of information management:

- Collect relevant information.
- Process information from data to knowledge.
- Store relevant information for timely retrieval to support mission command.
- Display relevant information tailored for the needs of the user.
- Disseminate relevant information.

1-121. While each echelon and type of unit organizes CPs differently, two types of CP cells exist: functional and integrating. Functional cells group personnel and equipment by warfighting function. Integrating cells group personnel and equipment by planning horizon. (Refer to FM 6-0 for more information.)

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Chapter 2

Reconnaissance and Security

Reconnaissance and security operations are essential to all successful operations. Through effective information collection and continuous reconnaissance, combined arms battalions develop and sustain the necessary understanding to defeat adaptive and determined enemies. Reconnaissance and security operations allow commanders to better understand the tactical, human, and political environment, visualize operations, develop the situation, and identify or create options to seize, retain, and exploit the initiative.

Reconnaissance and security operations answer Commander's critical information requirements (CCIR) and enable the commander to make decisions and direct forces to achieve mission success. Both reconnaissance and security operations enable successful offense, defense, and stability tasks.

SECTION I – INFORMATION COLLECTION

2-1. Information collection is an activity that synchronizes and integrates the planning and employment of sensors and assets as well as the processing, exploitation, and dissemination of systems in direct support of current and future operations. (Refer to FM 3-55 for more information.) At the tactical level, reconnaissance, security, and intelligence operations are the primary means by which the CAB executes information collection to answer the CCIRs and support decision making for the decisive operation. In addition to answering CCIR, information collection facilitates targeting and fills voids in information.

2-2. Intelligence is the product resulting from the collection, analysis, and interpretation of data and information provided by information collection assets. Timely and accurate intelligence provides Soldiers with the tools and the confidence they need to proceed aggressively or overcome an enemy's superiority in Soldiers and materiel. Timely and accurate intelligence usually depends on aggressive and continuous information collection.

ROLES AND RESPONSIBILITIES

2-3. Commanders apply combat power through the warfighting functions using leadership and information. Leaders rely on information and the intelligence resulting from it to make informed decisions. With timely and reliable information commanders can exercise their leadership through mission command. Everyone from the commander to the Soldiers on the ground has a role to play in the information battle and the effective application of combat power. (Refer to ADRP 3-0 for more information.)

COMMANDER

2-4. Commanders understand, visualize, describe, direct, lead, and assess operations. Understanding is fundamental to the commander's ability to establish the situation's context. Understanding involves analyzing and understanding the operational or mission variables in a given operational environment. It is derived from applying judgment to the common operational picture through the filter of the commander's knowledge and experience.

2-5. The commander prioritizes collection activities primarily through providing guidance and intent early in the planning process. Commanders must identify and update CCIRs to ensure they support the scheme of maneuver and decision points and are limited to only the most critical needs.

KEY STAFF

2-6. The CAB executive officer coordinates and directs the efforts of special staff officers,, integrates and synchronizes plans and orders, and supervises management of the CCIRs.

2-7. The CAB intelligence cell is responsible for providing timely and accurate intelligence to the commander, staff, and subordinate units. The battalion S-2 leads the cell and supervises and coordinates information collection (in conjunction with the battalion S-3) and the production and dissemination of intelligence. The battalion intelligence cell—

- Makes analytical predictions on when and where actions will occur.
- Provides analysis on the effects of the operational environment on friendly and threat COAs and capabilities.
- Evaluates the threat in terms of doctrine, threat characteristics, high value targets (HVTs) and high pay-off targets (HPTs), capabilities, and vulnerabilities.
- In conjunction with the battalion S-3, coordinates the entire staff's recommended PIRs for inclusion in the CCIRs.
- Integrates staff input to IPB products for staff planning, decision making, targeting, and assessment.
- Plans and controls intelligence operations in coordination with the S-3 and battalion fire support officer.

2-8. The CAB's primary means of collecting information are their subordinate maneuver companies, patrols, scout platoon, snipers, Soldier observations, and field artillery forward observers. The battalion S-2 may also request support from BCT information collection assets. If allocated, these assets would normally have a support relationship with the battalion. The BCT military intelligence company commander assists the battalion in planning when military intelligence company assets are provided to the battalion.

2-9. The S-2 section formulates collection requirements based on inputs from the commander and staff to develop the information collection synchronization matrix and the information collection plan. The S-2 also identifies those intelligence assets and resources that can provide answers to CCIRs.

2-10. The 2X is the doctrinal term used to refer to the person who manages counterintelligence and human intelligence operations in support of the overall unit operation. The 2X section works with the S-2 in information collection planning and assessing, taking developed counterintelligence and human intelligence requirements and identifying the proper assets to answer the requirements. This information is used to develop requirement planning tools and the overall collection plan.

2-11. The S-3 tasks and directs the staff along with the organic and assigned assets for information collection execution. The S-3 collaboratively develops the information collection plan to ensure its synchronization with the operation plan.

SCOUT PLATOON

2-12. The scout platoon is the CAB's primary means of conducting reconnaissance and security. The scout platoon provides early warning and helps control movement of the CAB or its elements. The scout platoon is usually under battalion control but could be attached to another unit in the CAB for certain operations. The CAB's sniper teams also can be assigned a surveillance mission. The following considerations apply to employment of the scouts:

- The distance that scouts operate away from the main body is restricted to the range of supporting indirect fires and secure LOC for resupply and CASEVAC.
- Scout platoons can easily be over-tasked because reconnaissance and security missions usually are continuous operations that require careful planning for both Soldiers' employment and their rest.
- Scouts are limited in their ability to destroy or repel enemy reconnaissance units.
- Augmenting the scout platoon with engineers could provide a better assessment of route and bridge trafficability, and OBSTINTEL.
- Scout platoons are limited in their ability to conduct dismounted operations.

COIST

2-13. The CAB S-2 section can provide an intelligence analyst to the companies to support the commander with processing, exploitation and dissemination of timely usable relevant intelligence. Depending on the operational tasks, the analyst can work independently for the commander, or as part of a company intelligence support team (COIST) supported by other company allocated personnel as determined by the commander.

2-14. In a more static environment the commander may form a robust COIST support team capable of collecting and analyzing data from multiple sources to make recommendations to the commander and disseminate information and intelligence to the S-2. (Refer to ATP 3-90.1 for more information.)

ABCT Military Intelligence Company

2-15. During operations, the CAB can receive support from the military intelligence company organic to the ABCT. The military intelligence company supports the CAB through collection and analysis of information, and dissemination of intelligence. Task-organized via command and support relationships, the military intelligence company provides continual input for the CAB commander by intelligence operations and intelligence analysis tasks as part of the information collection plan. (Refer to ADRP 2-0 for more information.)

Other Information Collection Assets

2-16. The CAB commander may have access to other information collection assets from the ABCT and higher, including UAS, recon troops, and possibly Army aviation. The CAB commander also may receive support from or provide support to HUMINT or signals intelligence. The ABCT has both signals intelligence and HUMINT capability in its military intelligence company. (Refer to FM 3-55 for more information.)

INFORMATION COLLECTION PROCESS

2-17. Information collection is a continuous feed of relevant information that facilitates the commander's situational awareness, and enables him to make better decisions. Information collection involves the entire staff. The CAB S-3 is the chief integrator of the information collection process. The S-2 assists the S-3, along with the rest of the staff. The CAB XO supervises synchronization of the information collection plan and its subsequent execution of the following collection tasks, which are described in detail in FM 3-55:

- Plan requirements and assess collection.
- Task and direct collection.
- Execute collection.

Plan Requirements and Assess Collection

2-18. The CAB commander and staff develop information requirements to answer uncertainties about the enemy or other conditions of the operational environment that could influence planning or execution. The staff develops information requirement (IR) during mission analysis and war gaming as part of the MDMP. One result of the MDMP is linking the situation and event templates with named areas of interest (NAIs) and targeted area of interest (TAIs), both of which are linked to DPs for the commander. The commander approves selected IR as his CCIR for his decision points (DPs).These NAIs, TAIs, and DPs are expressed on the Decision Support Tool (DST). DSTs link the information the commander needs to know with the geographic location where the information can be found, and the time the information is likely to be available (based on the event template). The CAB subsequently receives specific information requirements from the ABCT. (See Figure 2-1.) Finally, DSTs could have specific RFIs from subordinates and adjacent units. Placed together, these IR drive information collection operations.

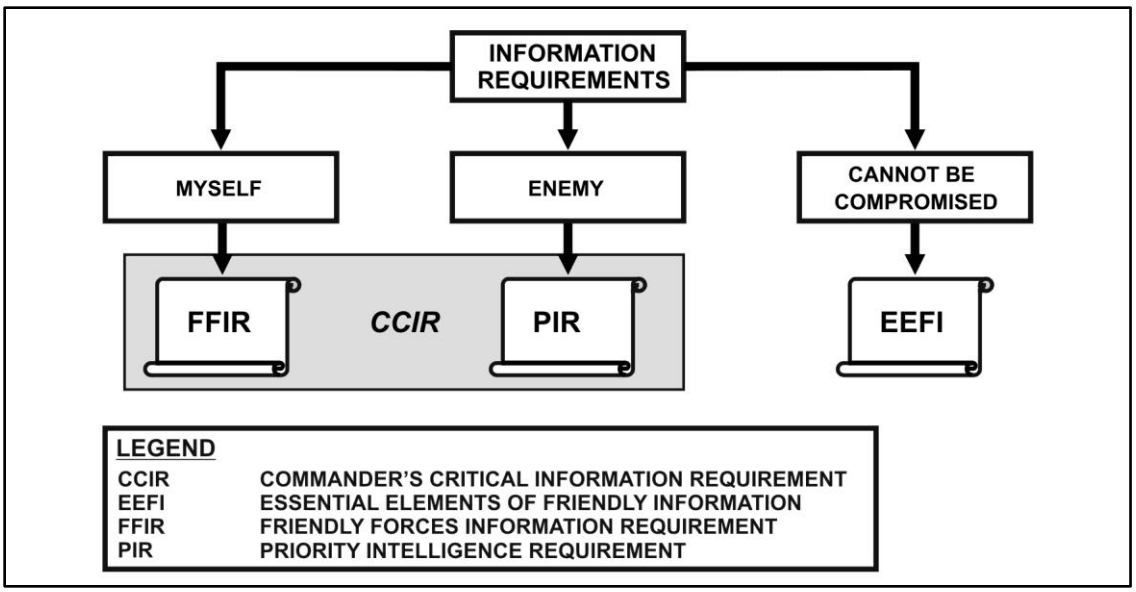

Figure 2-1. Information requirements

2-19. Regardless of the source, each IR should specify—

- WHAT (activity or indicator).
- WHERE (NAI or TAI).
- WHEN (time that the indicator is expected to occur and the latest time the information is of value [LTIOV]).
- WHY (justification - what decision is the PIR linked to).
- WHO (who needs the results).

2-20. As the staff gathers all of the IRs and PIRs, they sort the requirements to eliminate redundancies,,and prioritize them to assist in allocating resources. The commander then re-evaluates each requirement and finalizes his CCIR. This is a continuous process; as a given CCIR is answered or the operational situation changes, other CCIRs usually are generated.

2-21. Ideally, each IR is detailed and specific enough to facilitate collection. Once the commander approves the IR, he breaks the IR down into indicators. He then develops specific information requirements to ask very specific questions about indicators. Finally, the commander tasks these indicators to collectors and, taken together, they answer the larger question. For example: one of the CAB commander's PIR is "Will the enemy regiment attack through avenue of approach 2 with battalions abreast, or from the march?" This is a broad question and many indicators could lead to its answer. Specific information requirements to support this PIR might include:

- Will enemy units of 3-5 combat vehicles enter NAIs 11, 12, and 13 between 130400MAR and 130700MAR?
- Will enemy battalion #2 move from its assembly area at NAI 7 prior to 130230MAR?
- Identification of second enemy battalion (over 40 BMP2s) in NAI 11, 12, or 13.

DETERMINE INITIAL CCIRS AND EEFI

2-22. Determining initial CCIRs and EEFI is the most important prerequisite for information collection planning. The staff refines the list of requirements they derive from the initial analysis of information available and from intelligence gaps identified during IPB. They base this list on higher headquarters tasks, commander's guidance, staff assessments, and subordinate and adjacent unit requests for information. (Refer to FM 3-55 for more information.)

2-23. The staff then nominates these requirements to the commander to be CCIRs and EEFI. Commanders alone decide what information is critical based on their experience, the mission, the higher commander's intent, and input from the staff. The CCIRs are the primary focus for information collection activities.

DEVELOP THE INITIAL INFORMATION COLLECTION PLAN

2-24. The initial information plan is crucial to begin or adjust the collection effort to help answer requirements necessary to develop effective plans. The initial information collection plan sets information collection in motion. (A sample information collection matrix, formatted under the targeting method of decide, detect, deliver, and assess (D3A) is depicted in Figure 2-2.) Staffs may issue it as part of a warning order, a fragmentary order, or an operation order. As more information becomes available, staffs incorporate it into a complete information plan to the operation order.

2-25. At this point in the MDMP, the initial information plan has to be generic because the staffs still must develop friendly COAs. The basis for the plan is the commander's initial information collection guidance, the primary information gaps identified by the staff during mission analysis, recommendations from the targeting meeting (see paragraph 8-43 for more information on targeting), and the enemy situational template developed.

INFORMATION COLLECTION MATRIX

UNIT	PHASE	OPORD	FRAGORD	AS OF	PAGE
1-23 AR	III	07-4	22	170700-180659	1 of 1

	DECIDE		DETECT			DELIVER			ASSESS		
Priority	Category	HPT	Location	NAI	Asset	When	Asset	Effect	Objective	Asset	When
1	Dislocated Civilians	Kazd Mayor	Mayor's Office	A001	A CO	1100	CDR, 1-23 AR	Inform	Mayor does not misinform populace	A CO	1200 - 1200
Theme: 1-23 AR will monitor activities to ensure Sunni families return IAW HN directives.											
2	Dislocated Civilians	Kazd Populace	Radio Station	A002	B CO	1900	CDR, 1-23 AR	Co-opt	Radio does not misinform populace	B CO	2000 - 2000
Theme: Supporting Sunni family returns is the best way to bring prosperity to Kazd.											
3	Insurgent Activity	Illegal Check-point	NK 452319	A003	Scout PLT	0800 - 2000	QRF	Destroy	Radio remains open	Scout PLT	0800 - 2000
Theme: Illegal checkpoints hinder the freedom of movement to all civilians.											
4	Force Protection	Kazd Police Chief	Chief's Office	A004	D CO	1045	D CO	Warn	No shots heard by gate guards	D CO	1130 - 0630
Theme: Celebratory fires in support of the upcoming holiday are not acceptable near Base Camp Fargo.											
5	Elections	Kazd Populace	NK 502287	A005	C CO	0630 - 1700	C CO	Disorganize	No groups of 15 or more people	C CO	0630 - 1800
Theme: Free elections are vital to the independence of the nation. People should not interfere with voting.											

LEGEND

AR	ARMOR
CDR	COMMANDER
CO	COMPANY
HPT	HIGH-PAYOFF TARGET
FRAGORD	FRAGMENTARY ORDER
NAI	NAMED AREA OF INTEREST
OPORD	OPERATIONS ORDER

Figure 2-2. Information collection matrix

PERFORM RISK ASSESSMENT

2-26. The commander must consider whether the gathering of CCIR is worth the risk of compromising EEFI. This is often the case during surveillance of the maneuver objective. Commander emphasis on EEFI might

cause conflicts with the information collection plan. This requires that the commander make a tactical risk assessment, and may cause him to change his CCIR or adjust his assigned sensor.

2-27. By the nature of their missions, information collection assets must be placed where they might be lost to enemy action. The commander makes the decision whether the intelligence to be gained outweighs the risk to the information collection asset.

DEVELOP THE FINAL INFORMATION COLLECTION PLAN

2-28. Once the CAB chooses an asset to collect information for an IR, planners turn the special information requirements into a task for a subordinate unit. This task is a directive statement that tailors the reporting criteria to the collection capabilities of the tasked unit. The Information collection plan is developed through these asset tasking. Below are two examples:

- Example 1, mixing reconnaissance management:
  - A special information requirement could ask, "Is the enemy artillery battalion (over 12 2S-1s) located in NAI 8 between 040800 and 052000MAR?"
  - An information collection task to a scout team might state, "Report the presence of 2S-1 artillery systems in NAI 8 between 040800 and 052000MAR. LTIOV: 052200MAR."
  - An information collection task to a UAS team might state, "Report movement in NAI 8 between 040800 and 052000MAR. LTIOV: 052200MAR."
- Example 2, mixing reconnaissance management:
  - A special information requirement could ask, "Is the Gordian insurgency using the mosque in NAI 5?"
  - An information collection task to an Infantry patrol might state, "Report the presence of males in NAI 5 outside normal prayer hours (0545, 1215, 1430, 1700, 1930) between 011200 and 071200NOV. LTIOV: 071400NOV."
  - An information collection task to a Prophet team might state, "Report any radio transmissions in NAI 5 between 011200 and 071200NOV. LTIOV: 071400NOV."

2-29. Units prioritize information management tasks for each specific asset. For example, an information collection task that is the number one priority for an UAS might be lower in priority for a scout team. Figure 2-3 depicts an information collection tasking matrix.

TASKING MATRIX

NIA	LOCATION	DESCRIPTION	PIR	SIR	CO/TM A	CO/TM B	CO/TM C	CO/TM D	SCOUT PLT	Higher	Host Nation
1	Em219695 to EM221694	200 Meter Tunnel	(2) Will the enemy intercede to affect friendly operations?	Location of obstacles/mines and enemy car bombs. Rpt abandoned vehicles.		X			O		O
3	Em227699 to EM227688	150 Meter Bridge	(2) Will the enemy intercede to affect friendly operations?	Obstacles on or near the bridge. Abandoned cars in the area (bomb).			X		O		O
10	En380016 (Gnjilane)	Possible enemy operating base & criminal organization	(1) Where are the enemy operating bases in our AO/AI? (2) Will the Gordian 1st Corps intercede to affect BCT operations?	Increase UW activities. Movement of conventional forces. Rpt criminal organization activities.				X			O
16	En041143	Water Reservoir	(3) What changes in enemy activities indicate an attack?	Is reservoir water contaminated (possible terrorist target)?					X		O

X = tasked unit O = can collect

LEGEND

AO	AREA OF OPERATION	RPT	REPORT
AI	AREA OF INTEREST	TM	TEAM
CO	COMPANY	UW	UNCONVENTIONAL WARFARE
NAI	NAMED AREA OF INTEREST		

Figure 2-3. Information collection tasking matrix

PROCESSING, EXPLOITATION, AND DISSEMINATION

2-30. Processing, Exploitation, and Dissemination (PED) is a general concept that facilitates the allocation of assets to support intelligence operations. Under the PED concept planners examine all collection assets and then determine if allocation of additional personnel and systems are required to support the exploitation of the collected information. Accounting for PED facilitates processing collected information into usable and relevant information for all-source production in a timely manner. PED enablers are the specialized intelligence and communications systems, advanced technologies, and the associated personnel that conduct intelligence processing as well as support other single-source analytic capabilities within intelligence units. These enablers are distinct from intelligence collection systems and all-source analysis capabilities. PED enablers are prioritized and focus on intelligence processing and assessment to quickly support specific intelligence collection requirements and facilitate improved intelligence operations. (Refer to ADRP 2-0 and FM 2.0 for more information on PED and PED enablers.)

DISSEMINATE INFORMATION GATHERED

2-31. The ultimate goal of the dissemination process is to get the right information in the hands of the CAB commander in time for him to make the decision. Planners arrange direct dissemination from the collector to the requestor. Whenever possible, the information collection plan includes the requirement for direct dissemination of information to the requestor. For example, information regarding NAI 1 that triggers a targeting decision at TAI 1 (employment of the CAB's allocation of CAS) should go to the CAB commander as well as the FSO, ALO, and S-2. The staff does this to determine if the information answers the CCIR and is what the CAB commander wants to target. A well-synchronized information collection plan directs the collectors as to what nets to use to pass on information and to whom. The plan should detail when to use a net call, use of precedence coding (flash, priority, and so forth), and dissemination using digital systems. Perishability is a key consideration in dissemination. At the CAB level, most information generated during execution is combat information and requires immediate dissemination to the commander and subordinate units affected.

MONITOR OPERATIONS

2-32. As the operation progresses, the S-2 tracks the status of each information collection task, analyzes specific information requirement,and ultimately answers the CCIR. The S-2 pays particular attention to which assets are not producing the required results. It is very likely that the staff's assumptions about the enemy COAs will not prove entirely correct. This may result in changes to the IR or adjustments to the collection timeline. During execution, the staff assesses the value of the information they received from collection assets and refines information collection tasks to fill in gaps.

2-33. Each unit monitors and evaluates its information collection efforts during execution. Company commanders can use the intelligence analyst from the S-2 section, or the COIST, when METT-TC allows the formation of one to manage the information collection task by maintaining database information, collecting and reporting information to higher, lower, and adjacent units.

UPDATE INFORMATION COLLECTION PLAN

2-34. As with all operations, the collection plan rarely survives contact with the enemy and requires adjustment during execution. The following factors could drive changes to the collection plan:

- A CCIR is satisfied or overcome by events, freeing an asset for other operations.
- A single information collection asset has unexpected success, freeing redundant assets for other operations.
- An asset cues the collection manager but requires confirmation that requires dynamic retasking of other assets.
- The timing of the operation has become desynchronized, requiring modification of LTIOV or changes to prioritization.
- The commander generates new CCIR as the operation evolves and the enemy situation develops.
- A change to the enemy situation (that is the enemy follows an unexpected COA).
- Higher headquarters changes the mission of the CAB into an unplanned operation

2-35. The steps in updating the information collection plan are collaborative efforts by the S-2 section and operations staff. Some steps predominately engage the intelligence staff, others the operations staff. Some steps may require coordination with other staff sections, and others may engage the entire operations and intelligence working group. The steps in updating the collection plan are discussed in further detail in FM 3-55.

SECTION II - RECONNAISSANCE

2-36. Reconnaissance identifies terrain characteristics, enemy and friendly obstacles to movement, and the disposition of enemy forces and civilian population so the commander can maneuver his forces freely and rapidly. (Refer to FM 3-98 for more information.) Reconnaissance also answers the CCIRs. Reconnaissance prior to unit movements and occupation of assembly areas is critical to protecting the force and preserving combat power. It keeps the force free from contact as long as possible so that it can concentrate on its decisive operation.

RECONNAISSANCE FUNDAMENTALS

2-37. During both planning and performing reconnaissance operations, the CAB commander and staff keep seven reconnaissance fundamentals in mind:

- Ensure continuous reconnaissance.
- Do not keep reconnaissance assets in reserve.
- Orient on the reconnaissance objective.
- Report information rapidly and accurately.
- Retain freedom of maneuver.
- Gain and maintain enemy contact.
- Develop the situation rapidly.

FORMS OF RECONNAISSANCE

2-38. To logically group specific information requirements (SIRs) and tasking into missions for subordinate commanders, the CAB commander uses one of five forms of reconnaissance. (Refer to FM 3-98 for more information.) The forms of reconnaissance refine the scope of the reconnaissance commander's mission and give it a spatial relationship. The five forms of reconnaissance are:

- Zone reconnaissance.
- Area reconnaissance.
- Route reconnaissance. Reconnaissance in force.
- Special reconnaissance.

ZONE RECONNAISSANCE

2-39. A zone reconnaissance is a directed effort to obtain detailed information concerning all enemy forces, routes, obstacles, and terrain within a zone defined by boundaries. The commander assigns a zone reconnaissance when the situation is vague or when information about cross-country trafficability is desired. Zone reconnaissance is appropriate when the unit's previous knowledge of the terrain is limited or when combat operations have altered the terrain. The reconnaissance is either enemy-oriented or terrain-oriented. A zone reconnaissance can be deliberate and time consuming.

2-40. The commander gives his guidance for a zone reconnaissance, which may be to determine the best routes, to move through the zone, or to locate an enemy force. The commander defines the zone to be reconnoitered by using lateral boundaries, a line of departure, and the objective. The objective provides a termination point for the mission, and might be occupied by the enemy. A phase line also can be used as a termination point. Figure 2-4 provides an example of a zone reconnaissance for a scout platoon.

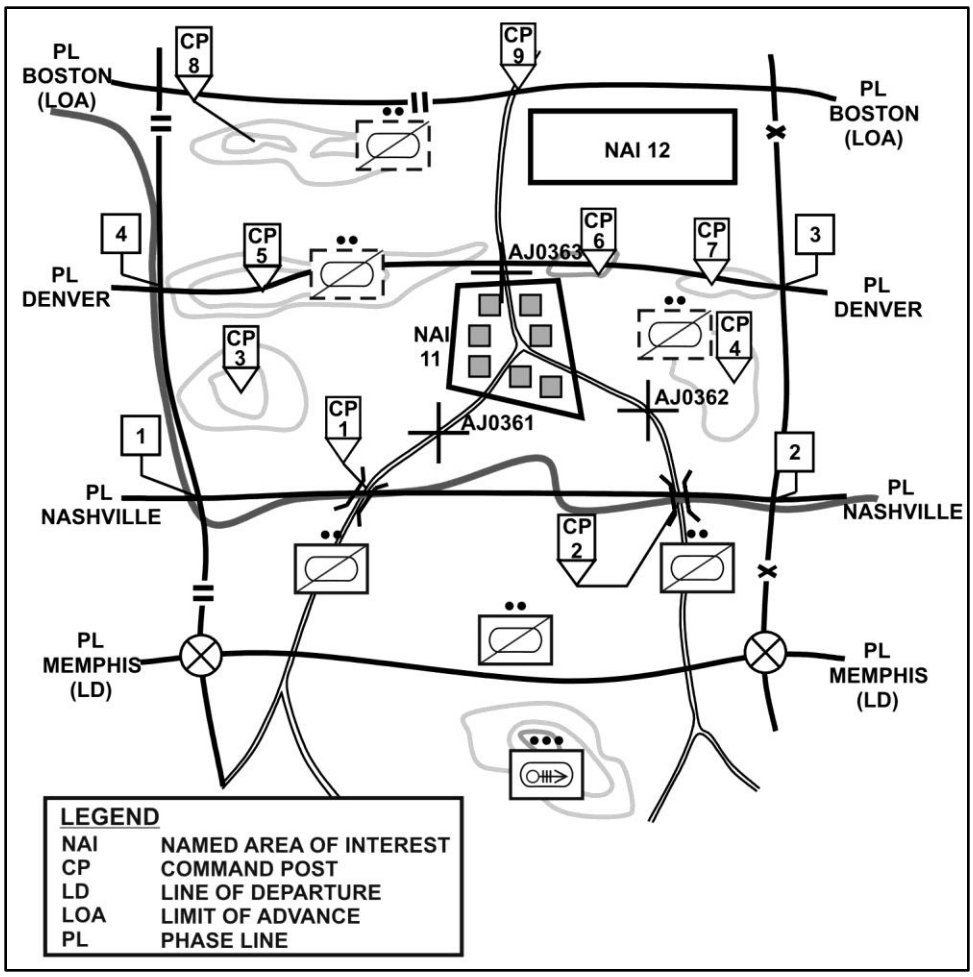

Figure 2-4. CAB zone reconnaissance

AREA RECONNAISSANCE

2-41. An area reconnaissance is a directed effort to obtain detailed information concerning the terrain or threat activity within a prescribed AOI. An area reconnaissance provides information about a specified area such as a town, ridge, woods, or other feature critical to operations. The commander must specify exactly what to look for and why. There are two ways of conducting reconnaissance of the area: by maneuvering elements through the area, or by establishing observation posts within or external to the AOI.

2-42. The commander designates the area to be reconnoitered by establishing a boundary line that encircles it. Area reconnaissance differs from zone reconnaissance in that the unit moves to the assigned area by the most direct route. Once in the area, the platoon reconnoiters in detail using zone reconnaissance techniques.

ROUTE RECONNAISSANCE

2-43. A route reconnaissance obtains detailed information about specific routes. The route usually is a road that units can use for an axis of advance, MSR, or other movement. Units perform route reconnaissance to ensure that the route is clear of obstacles and enemy, and that it will support planned movement. Units sometimes perform a route reconnaissance as part of an area or zone reconnaissance.

2-44. The number of routes reconnoitered depends on the length of the routes, the enemy situation, and the nature of the routes themselves. When enemy contact is likely or expected, or when the route is long and stretches through difficult terrain, the CAB might require the entire scout platoon to reconnoiter that one route. If routes are short and enemy contact is unlikely, the platoon reconnoiters as many as three routes (one for each

section) but no more. When the reconnaissance tempo is rapid or the desire for specialized route information is high, the scout platoon should be augmented with engineer reconnaissance capability.Reconnaissance in Force

2-45. A reconnaissance in force is a deliberate combat operation designed to discover or test the enemy's strength, dispositions, and reaction, or to obtain other information. A commander uses a reconnaissance in force when the enemy is known to be operating within an area and the commander cannot obtain adequate intelligence by other means. Since it generally must penetrate the security area of a larger enemy force, the CAB requires augmentation to conduct a reconnaissance in force. These augmentations include:

- Helicopter or UAS reconnaissance.
- CBRN reconnaissance assets.
- Artillery (or missile) fire support.
- Short-range air defense (SHORAD).
- Engineer mobility and countermobility assets.

2-46. A unit may also conduct a reconnaissance in force in restrictive terrain where the enemy is likely to ambush smaller reconnaissance forces. A reconnaissance in force is an aggressive reconnaissance, conducted as an offensive operation in pursuit of clearly stated CCIR. The overall goal of a reconnaissance in force is to determine enemy weaknesses that can be exploited. It differs from other reconnaissance operations because it usually is conducted only to gain information about the enemy and not the terrain.

SPECIAL RECONNAISSANCE

2-47. Special reconnaissance includes reconnaissance and security actions conducted as a special operation in hostile, denied, or politically sensitive environments to collect or verify information of strategic or operational significance, employing military capabilities not normally found in conventional forces.

PLANNING CONSIDERATIONS

2-48. Reconnaissance planning starts with the commander identifying the CCIR. This process may be conducted while the unit is planning or preparing for an operation; in many cases, it continues throughout the operation. (Refer to FM 3-98 for more information.) The commander outlines the following:

- Focus.
- Tempo.
- Engagement criteria.
- Reconnaissance objective.

2-49. The commander considers mission variables as he plans for mounted, dismounted, aerial, or combinations of reconnaissance. Conditions that lead to a decision about the type of reconnaissance include:

- Time constraints.
- Required detail level of reconnaissance.
- Availability of air units to perform coordinated reconnaissance with ground assets.
- IPB information.
- Avenues of approach that support friendly movement and exploit enemy weaknesses.
- Key positions, especially flanks that can be exploited.
- Information from observation posts.
- Type of terrain.
- Environmental conditions, such as deep snow and muddy terrain that greatly hinder mounted reconnaissance.

2-50. The commander considers employing UAS for ground reconnaissance. Unmanned aircraft systems provide the commander with essential terrain and enemy information. Most UASs can operate in daylight or limited visibility and are difficult to detect or shoot down.

2-51. Leaders at all echelons coordinate and synchronize reconnaissance efforts. The key point is to use reconnaissance assets based on their capabilities and use their complementary capabilities to verify and expand on available information.

2-52. Sustainment planning is indispensable throughout the planning process. The commander assesses all constraints and considers the following:

- Resupply procedures for both mounted and dismounted reconnaissance missions.
- Predetermined locations and times for resupply.
- TTPs for casualty extraction and medical evacuation.
- Pickup points and times for pickup and aerial extraction of casualties.
- Resupply procedures for Class VIII by AHS support elements.

2-53. The commander must provide specific guidance to the reconnaissance force. The commander's guidance for reconnaissance includes focus, tempo, and engagement criteria. This guidance is an extension of the commander's intent and is designed to focus the reconnaissance commander's efforts in relationship to the CAB mission.

RECONNAISSANCE FOCUS

2-54. Reconnaissance focus, combined with one or more reconnaissance objectives, helps to concentrate the efforts of the reconnaissance assets. The commander's focus for reconnaissance usually falls in three general areas: CCIR, targeting, and voids in information. The commander's focus enables reconnaissance personnel to prioritize taskings and narrow their scope of operations. An operation may have a terrain focus where status of routes, bridges, and obstacles are more important than the enemy. Conversely, the operation may focus on the enemy where locating his security zone, main body, and reserves are essential. Additionally, commanders may express their focus in terms of reconnaissance pull and push. (Refer to FM 3-98 for more information.)

Reconnaissance Pull

2-55. The commander uses a reconnaissance pull when the enemy situation is not well known and or the situation is rapidly changing. Reconnaissance pull fosters planning and decision-making based on changing assumptions into confirmed information. The CAB uses initial assumptions and PIR to deploy reconnaissance assets as early as possible to collect information for use in developing COAs. The commander uses information collection assets to confirm or deny initial PIRs prior to the decision on a COA or maneuver option, thus pulling the CAB to the decisive point on the battlefield. Success of the reconnaissance pull requires an integrated reconnaissance plan that can be executed prior to the commander having to make a COA decision.

Reconnaissance Push

2-56. The commander uses a reconnaissance push once he has committed to a COA or maneuver option. The commander pushes his information collection assets forward, as necessary, to gain greater visibility on specific NAIs to confirm or deny the assumptions on which the COA is based. Information gathered during reconnaissance push is used to finalize the CAB plan.

Reconnaissance Tempo

2-57. The commander establishes the time requirements he envisions for the reconnaissance force. He then expresses these requirements in a statement that describes the degrees of completeness, covertness, and potential for engagement that he is willing to accept. The following relationships describe the tempo CAB commanders use to control the momentum of reconnaissance operations. It is important for commanders to understand that there are advantages and disadvantages to each manner in which the commander issues guidance on reconnaissance tempo. (Refer to FM 3-98 for more information.)

Engagement Criteria

2-58. The commander determines which enemy forces he expects his reconnaissance forces to engage and with what level of force. This decision aids the reconnaissance leadership to plan direct and indirect fires, and to

establish bypass criteria. This decision is very important when the reconnaissance force is augmented with combat systems to conduct forceful reconnaissance.

AERIAL SURVEILLANCE

2-59. UASs are capable of locating and recognizing major enemy forces, moving vehicles, weapons systems, and other targets that contrast with their surroundings. In addition, UASs are capable of confirming the position of friendly forces and locating the presence of noncombatant civilians. Employed together, UAS and ground reconnaissance make an excellent team.

2-60. While UASs are excellent force multipliers, they have limited effectiveness in locating enemy forces that are well covered or concealed. They also are not well suited for wide area searches. Rather, employing a UAS as part of an overall collection plan makes optimal use of their capabilities. (Refer to FM 3-04.155 for more information.)

2-61. Before using a UAS, the unit must coordinate airspace with the brigade aviation element (BAE). The minimum information required is—

- Time of launch/duration of mission.
- Location of the UAS restricted operations zone.
- Launch and landing coordinates.
- Required altitude.
- Laser designation code (if applicable).

RQ-11 Raven

2-62. The CAB currently has the Raven for UAS capability in the scout platoon and HHC. The Raven is a man-portable, hand-launched small aerial vehicle designed for reconnaissance and surveillance. Two Soldiers operate the Raven as an additional duty. The Raven requires no Class III fuel because batteries power an electric motor, which powers the Raven.

2-63. Most Raven missions occur between 100 and 300 feet. Depending on the battery used, mission time can range from 60 to 90 minutes. A remote video terminal also provides a real time video feed of the mission. The optics package includes an electro-optical, color camera nose for day operations, and two infrared/thermal noses for night operations (Refer to FMs 3-52 and 3-52.1 for more information.)

RECONNAISSANCE HANDOVER

2-64. Coordinating the transfer of an assigned reconnaissance area from one element to another is known as reconnaissance handover. Reconnaissance handover can involve physical, visual, electronic or digital observation in any number of combinations. Assets such as ground sensors and UAS are also transferred. There are numerous ways the CAB scout platoon and cavalry troops from the cavalry squadron can work together to perform reconnaissance handover during operations.

OFFENSE

2-65. During the ABCT offense, the cavalry squadron is usually forward of the CABs. During the approach to the objective the cavalry troops and CAB scouts may do the following (refer to Figure 2-5a-c):

- The cavalry troop may hand over key observation post positions to CAB scouts as they advance through the AO.
- The cavalry troop may guide the CAB scouts into position and keep them informed about terrain, enemy positions, and obstacles that they have already found.
- CAB scouts can provide overwatch for the cavalry troop scouts moving to their next series of OPs or conducting reconnaissance of the area or zone.

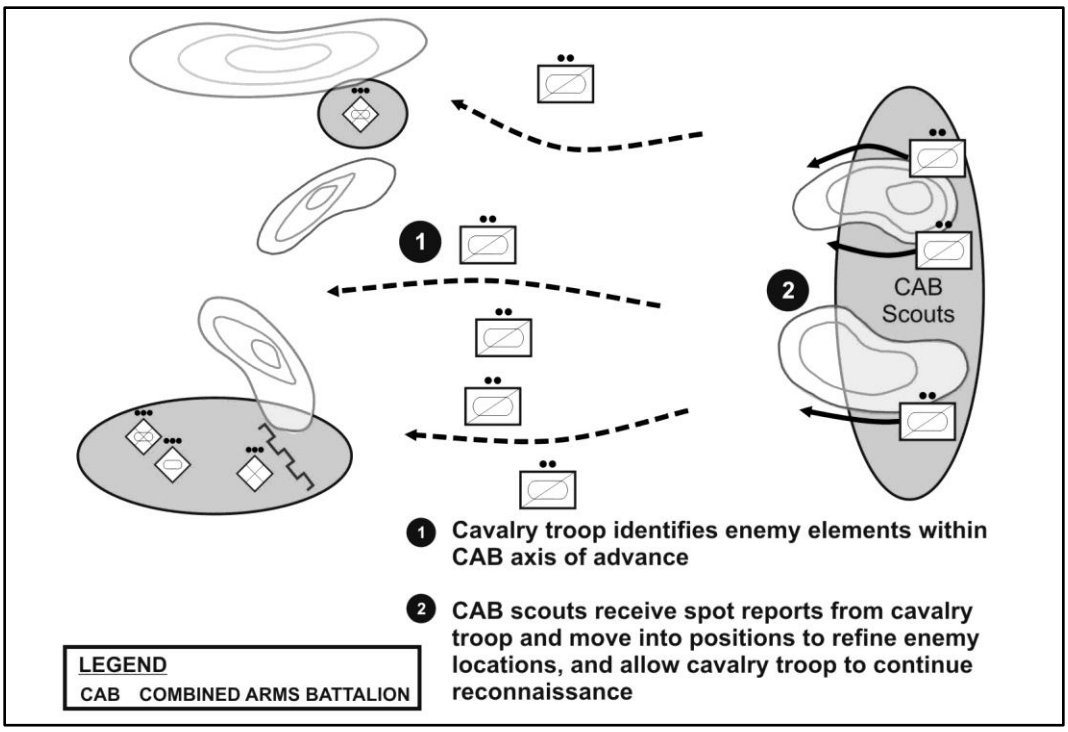

Figure 2-5a. Cavalry troop and CAB scout employment during ABCT offense (steps 1-2)

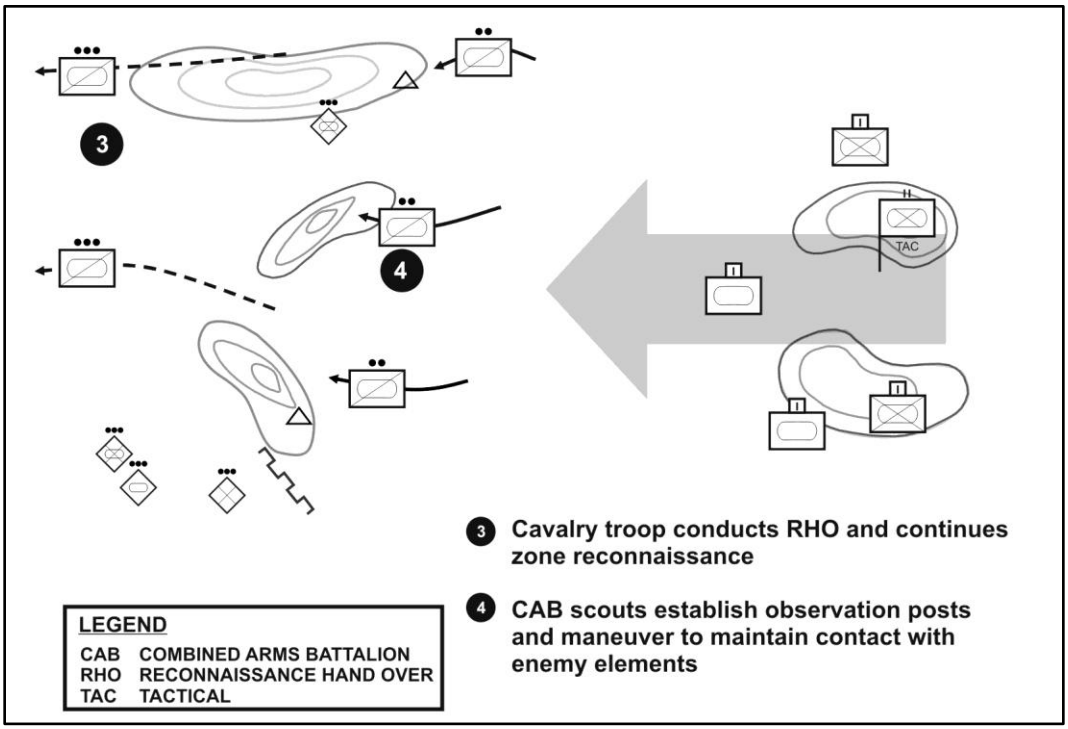

Figure 2-5b. Cavalry troop and CAB scout employment during ABCT offense (steps 3-5)

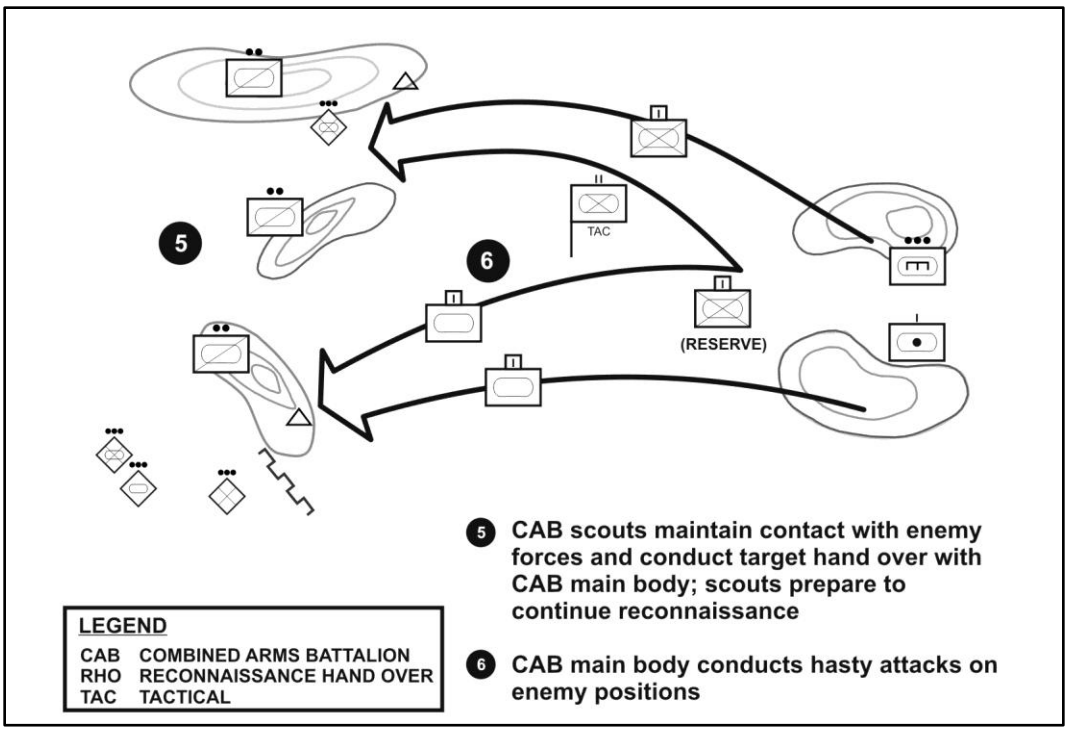

Figure 2-5c. Cavalry troop and CAB scout employment during ABCT offense (steps 5-6)

COUNTER RECONNAISANCE

2-66. In the defense, the primary mission of the scout platoon is to provide security and early warning for the CAB. Scouts conduct screens to the front, flanks, and rear of the CAB. The scout platoon generally accomplishes a screen by establishing a series of OPs and conducting patrols to ensure adequate reconnaissance and surveillance of the assigned sector.

2-67. The CAB employ its scouts to provide screening in depth for the counter reconnaissance force. The reconnaissance teams and counter reconnaissance team occupy the most forward positions. The employment and coordination of the CAB scouts and cavalry troops in the counter reconnaissance operation is TACSOP-driven.

2-68. Using a company team in a forward screen role provides a strong counter reconnaissance capability, gives a measure of deception, and facilitates early engagement. The company team also has the assets to identify and destroy most enemy reconnaissance elements.

2-69. The CAB also can integrate its scouts into the ABCT counter reconnaissance mission. Cavalry troops and scout platoons provide stealthy observation and early warning of the enemy's reconnaissance elements. The reconnaissance teams locate the enemy reconnaissance forces, and then guides the counter reconnaissance elements to them. The scouts maintain a low signature by not engaging any targets. Tanks, BFVs, and dismounted infantry in the counter reconnaissance team kill the enemy reconnaissance. Digitization enables the scouts and counter reconnaissance team to execute a more fluid and dynamic counter reconnaissance fight with less chance of fratricide due to the increased clarity of unit positions on the battlefield.

2-70. Unit TACSOPs must address procedures for inoperative scout communications systems. Scouts with inoperative systems risk fratricide; the CP should account for scouts by using analog methods and with manual input of platforms into the common operational picture. CPs must also have some method of tracking the operational status of each scout's FBCB2 system.

2-71. In order for the CAB scout platoon and cavalry troop to work together, the CAB and ABCT staffs need to coordinate the following:

- Communications and digital architecture.
- Mission command architecture.
- NAI coverage and intelligence gaps.
- Fire support coordination measures (FSCMs).
- Fratricide avoidance measures.

SECTION III - SECURITY

2-72. The ultimate goal of security is to protect the force from surprise and reduce the unknowns in any situation. That force being protected may be the civilian population, civil institutions, and civilian infrastructure within the unit's area of operation. A commander may conduct security operations to the front, flanks, or rear of the friendly force. Security operations are shaping operations. As a shaping operation, economy of force is often a condition of tactical security operations.

PURPOSE OF SECURITY OPERATIONS

2-73. The purpose of security is to provide the higher commander with information about threat and terrain, prevent the main body from being surprised, provide time and space for reaction, preserve initiative and freedom of movement/maneuver, and to protect and preserve the combat power for decisive employment. Reconnaissance and counterreconnaissance are inherent and continuous in all security tasks. The focus of reconnaissance is preventing the surprise of the protected force commander. Reconnaissance provides information that allows the commander to make decisions regarding maneuver and fires, and provides reaction time to implement those decisions.

2-74. The CAB also conducts internal security operations using its own scout platoon, Armor companies, or mechanized Infantry companies. The CAB's ability to conduct security missions in support of its own operations is generally limited to screening. The CAB generally performs two types of security missions: area security and screen. It can conduct guard operations when augmented with artillery and aviation.

2-75. Counterreconnaissance denies the enemy information about friendly operations or to destroy or repel enemy reconnaissance elements. Security forces operate either offensively or defensively when executing counterreconnaissance. The designated counterreconnaissance plan provides the active and passive measures to defeat the enemy's reconnaissance efforts and protect the friendly force from observation. Continuous reconnaissance and counterreconnaissance contribute to the fundamentals of security operations.

FUNDAMENTALS OF SECURITY

2-76. The five fundamentals of security operations are:

- Provide early and accurate warning.
- Provide reaction time and maneuver space.
- Orient on the force, area, or facility to be protected.
- Perform continuous reconnaissance.
- Maintain enemy contact.

PROVIDE EARLY AND ACCURATE WARNING

2-77. The security force provides early, accurate warning by detecting the threat force quickly and reporting information accurately to the main body commander. Early warning of threat activity provides the commander with the time, space, and information needed to retain the tactical initiative and to choose the time and place to concentrate against the threat. At a minimum, the security force should operate far enough from the main body to prevent enemy ground forces from observing or engaging the main body with direct fire. Maneuver forces, sensors, and tactical UAS are positioned to provide long-range observation of expected threat avenues of approach.

PROVIDE REACTION TIME AND MANEUVER SPACE

2-78. The security force operates as far from the protected force as possible within supporting range of the protected force, consistent with the factors of METT-TC. Provided communications are maintained, more distance usually yields greater reaction time and maneuver space for the protected force commander. The security force fights as necessary to gain and retain adequate time and space for the protected force commander, allowing him to maneuver and concentrate forces to counter the threat.

ORIENT ON THE FORCE, AREA, OR FACILITY TO BE PROTECTED

2-79. The security force focuses all its actions on protecting the secured force or facility and providing maximum early warning of threat activity. It operates between the main body and known or suspected enemy units. The security force must move as the main body moves and orients on its movement. The security commander must know the main body's scheme of maneuver to maneuver his force so it remains between the main body and the enemy. The value of terrain occupied by the security force depends on the protection it provides to the main body commander.

PERFORM CONTINUOUS RECONNAISSANCE

2-80. Security comes in large part from knowing as much as possible about the threat and terrain within the assigned AO. This detailed knowledge results from ongoing, focused reconnaissance that aggressively and continuously reconnoiters key terrain; seeks the location, composition, and disposition of the threat; and attempts to determine the threat's COA early so that the CAB can counter it. Stationary security forces use combinations of observation posts, UAS, patrols, and other information collection assets to perform continuous reconnaissance. Moving security forces accomplish this fundamental by performing area, zone, or route reconnaissance in conjunction with temporary OPs and battle positions.

MAINTAIN ENEMY CONTACT

2-81. Unless otherwise directed, contact, once gained, is not broken. The individual scout or sensor that first makes contact does not have to maintain it; however, the security force, collectively, must maintain contact. The security force also must continuously gather information on the threat's activities, and prevent the threat from surprising the main body or endangering adjacent friendly forces.

2-82. This fundamental requires—

- Continuous contact (visual, electronic, sensor, or a combination).
- Capability to use direct and indirect fires.
- Freedom to maneuver.
- Depth (of observers in time and space).

SECURITY OPERATIONS

2-83. Security operations encompass five tasks—screen, guard, cover, area security, and local security.

- *Screen* is a security task that primarily provides early warning to the protected force. (ADRP 3-90)
- *Guard* is a security task to protect the main body by fighting to gain time while also observing and reporting information and preventing enemy ground observation of and direct fire against the main body. Units conducting a guard mission cannot operate independently because they rely upon fires and functional and multifunctional support assets of the main body. (ADRP 3-90)
- *Cover* is a security task to protect the main body by fighting to gain time while also observing and reporting information and preventing enemy ground observation of and direct fire against the main body. (ADRP 3-90)
- *Area security* is a security task conducted to protect friendly forces, installations, routes, and actions within a specific area. (ADRP 3-90)
- *Local security* is a security task that includes low-level security activities conducted near a unit to prevent surprise by the enemy. (ADRP 3-90)

SCREEN

2-84. The primary purpose of a screen is to provide early warning. It observes, identifies, and reports enemy actions. A screen provides the least amount of protection of any security mission. In general, a screening force fights in self-defense; however, when necessary, it can engage and destroy enemy reconnaissance elements within its capabilities. (Refer to FM 3-98 for more information.)

COMBINED ARMS BATTALION SCREEN

2-85. At the battalion level, the scout platoon usually performs screen missions in support of CAB missions. When the terrain provides multiple enemy avenues of approach, the battalion commander can attach the scout platoon to a company to conduct a screen. The screening force establishes a series of observation posts and conducts patrols to observe NAIs and targeted areas of interest (TAIs) to meet the CCIR. Additionally, the BCT might task the CAB itself to perform screening missions in support of a BCT defense or other operation. (See Figure 2-6.) In this instance, the CAB maneuver companies take on the role traditionally performed by the battalion scouts who may or may not be placed OPCON to a company commander.

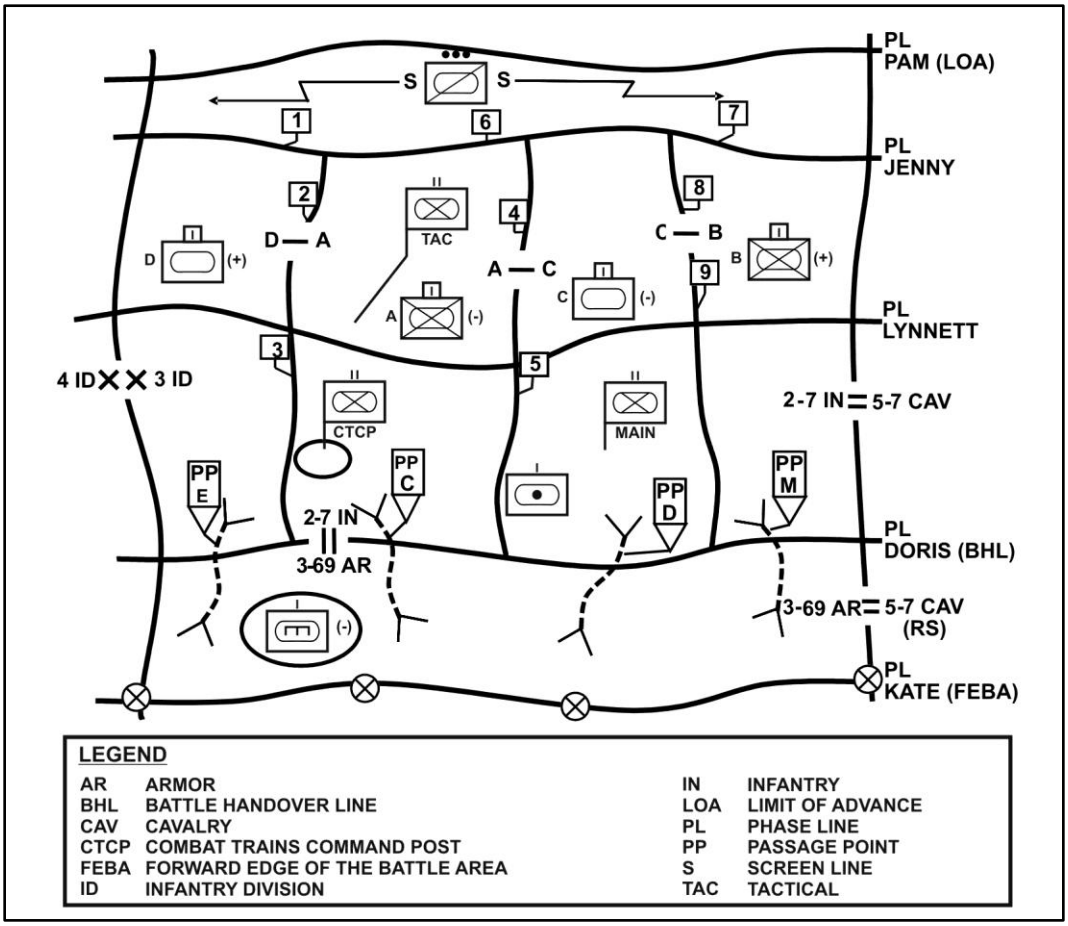

Figure 2-6. CAB conducting screen mission for ABCT

PLANNING A SCREEN

2-86. When assigning a screen mission to a company, the commander designates the general trace of the screen and the time it must be established. This general trace is based upon the S-2's designation of NAIs. The initial screen line should be forward of the general trace but remain within range of supporting artillery and battalion mortars. Screen lines are depicted as phase lines; passage graphics are included in the overlay. Other planning considerations are:

- Designate the left and right limits of the screen as well as a phase line for the near boundary. This phase line also can become the on-order battle handover line (BHL).
- Confirm which unit has responsibility for the area between the screening force's rear boundary and the main battle area (MBA). This should be the company that occupies the areas behind the screen.
- Propose general locations for observation posts that enable observation of the avenues of approach into the area.
- Propose locations for prepared or situational obstacles.
- Develop trigger lines to mass direct and indirect fires.
- Select routes or lanes to facilitate rearward displacement.
- Augment the security force as needed to provide intelligence, engineer, air defense, signal, and sustainment.
- Ensure rearward passage of lines (RPOL) planning and rehearsals are executed.

2-87. When the CAB receives a security mission, the BCT usually provides this general guidance:

- Force or area to be secured.
- Location and orientation of the security area.
- Time allocated to establish the security force.
- Criteria for ending the security mission.
- Task organization and augmentation of security forces.
- Engagement and displacement criteria.

FORCE OR AREA TO BE SECURED

2-88. The commander must designate the exact force to be secured. This designation determines the limits of the security force's responsibilities. If the main body moves, the security force also moves to maintain its position in relation to the main body.

LOCATION AND ORIENTATION OF THE SECURITY AREA

2-89. The commander determines the location, orientation, and depth of the security area in which the security force will operate. The commander might also designate specific avenues of approach or NAIs he wants covered. Depth in the security area provides the main body with more time to react to approaching enemy ground units. Occupying a deep security area allows the security force to destroy enemy reconnaissance assets without compromising critical observation posts or positions, or becoming decisively engaged. The wider the area to be secured, the more difficult it is for the security force to position in depth; this is because it must position itself across the width of the area.

2-90. The CAB then conducts a detailed analysis of the terrain in the security area. The commander establishes his initial dispositions (usually a screen line) as far forward as possible on terrain that affords good observation of avenues of approach. Next, he clearly assigns responsibility for identified avenues of approach and designated NAIs. For a screen, the initial line must be within supporting range of the main body, yet provide the desired amount of early warning.

TIME ALLOCATED TO ESTABLISH THE SECURITY FORCE

2-91. The commander must determine when to establish the security force based on the activity of the main body and expected enemy activity. To prevent enemy forces from penetrating the security area undetected, he must allow enough time for the security force to move into and occupy the security area.

CRITERIA FOR ENDING THE SECURITY MISSION

2-92. Security operations are usually time- or event-driven. The criteria for ending a security operation can be the completion of an operation by the main body, a fixed time period (for example, not allowing enemy penetration of a phase line for two hours), or criteria based on the enemy force (such as size or specific element).

TASK ORGANIZATION AND AUGMENTATION OF SECURITY FORCES

2-93. The commander is responsible for task-organizing elements to augment the security force as dictated by METT-TC. Depending on the threat and the size of the security area, additional combat assets may augment the security force's organic combat power. Additional augmentation also can come from the military intelligence company in the form of ground-based sensors or UAS attachments; engineer augmentation to enhance mobility, countermobility, and survivability; or from the fires battalion.

ENGAGEMENT AND DISPLACEMENT CRITERIA

2-94. The commander provides general engagement and displacement criteria as an extension of his commander's intent. Engagement criteria establish the conditions under which units are expected to engage the threat, and what conditions dictate handing over threat elements to the CAB. The commander's understanding of the BCT commander's expectations, coupled with his knowledge of the threat's most likely COA, enables him to determine his battalion's engagement criteria. The commander might require units only to observe threat actions, but not engage the threat; the purpose is to deceive the enemy as to the whereabouts of his screen line. He also could opt to engage all threat personnel or lightly armored vehicles on sight. When conducting stability tasks, he may stipulate nonlethal weapons.

2-95. With clear engagement criteria, the commander can now establish displacement criteria based on what the battalion can, cannot, or—because of tactical considerations—will not destroy. The commander defines the events or triggers that will cause the security force to displace; such as, a certain size force, or specific element of the threat formation reaching a given point or graphic control measure.

GUARD OPERATIONS

2-96. A guard mission is assigned to protect the force by observing the enemy, reporting pertinent information, and fighting to gain time. The guard force differs from a screen force in that it contains sufficient combat power to defeat, repel, or fix the lead elements of an enemy ground force to prevent it from engaging the main body with direct fires. The guard force normally deploys over a narrower front than a comparably sized screening force, allowing greater concentration of combat power. The guard force routinely engages enemy forces with both direct and indirect fires and operates in range of the main body's indirect fire weapons. The guard force commander must understand fully the degree of security his unit provides the larger unit. (Refer to FM 3-98 for more information.) This understanding is critical because, as the battle progresses, the higher unit commander may require the degree of security to change (for example, from early warning to detailed and aggressive security for the main body). There are three types of guard operations conducted in support of a stationary or moving friendly force: advance, rear, and flank guard. (See Figure 2-7.)

ADVANCE GUARD

2-97. The advance guard moves ahead of the main force to ensure its advance is uninterrupted, protect the main body against surprise, facilitate its advance by removing obstacles, capturing intact bridges, and enable the main body to deploy.

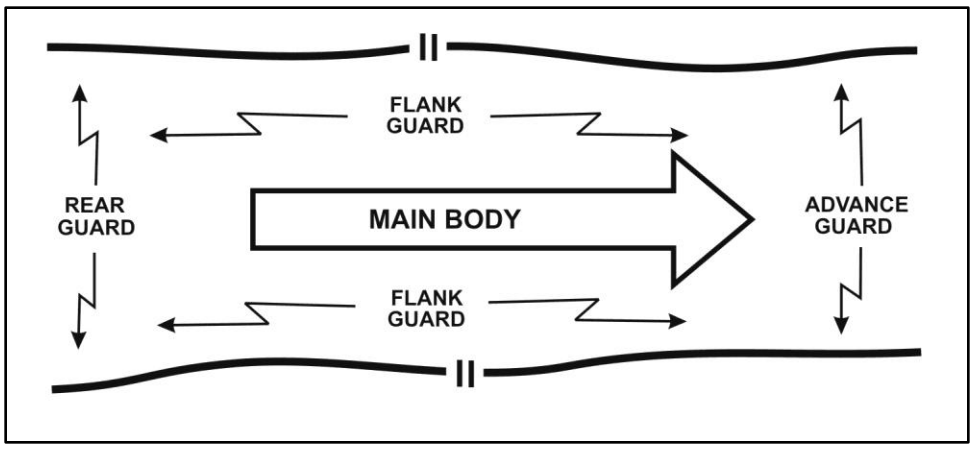

Figure 2-7. Guard operations

2-98. Usually, the advance guard functions as a movement to contact. Generally, a CAB receives an advance guard mission when the BCT moves as part of the division main body in a movement to contact. In deploying an advance guard, the BCT ensures the CAB has priority of fires from the field artillery battalion. Unlike a movement to contact, however, the advance guard clears the axis of enemy elements within its capability; this allows the unimpeded movement of the main body forces. The advance guard develops the situation to hand over the enemy to the maneuver forces.

2-99. Based on METT-TC, trail elements of the advance guard must ensure they maintain adequate distance forward of the main body's lead elements to ensure freedom of maneuver for the main body. These distances are reduced in restrictive terrain and in low visibility conditions. The CAB commander establishes phase lines to control the movement of the main body and the advance guard. In addition, the battalion commander must take into consideration the range of supporting indirect fires.

2-100. The advance guard force destroys enemy forces through hasty attacks. It may be necessary for the battalion to mass at certain locations, destroy the enemy, report, and continue its mission. If enemy resistance is well prepared and cannot be destroyed, the advance guard reconnoiters to identify a bypass route for the main body, report enemy size and location, and, based on BCT commander's intent, fix and bypass the enemy. It is then the responsibility of follow-on attacking forces to destroy the bypassed enemy. The main body commander can elect not to bypass the enemy, but to attack. In this case, the advance guard keeps the enemy contained and prepares to pass main body elements through to eliminate the enemy.

REAR GUARD

2-101. The rear guard protects the exposed rear of the main body. This occurs during offensive tasks when the main body breaks contact with flanking forces or during a retrograde. The commander may deploy a rear guard behind both moving and stationary main bodies. The rear guard for a moving force displaces to successive BPs along PLs or delay lines in depth as the main body moves. The nature of enemy contact determines the exact movement technique and form of bounding used in the displacement (bounding overwatch with successive bounds or bounding overwatch with alternate bounds or travelling overwatch).

FLANK GUARD

2-102. A CAB may receive a flank guard mission during a division movement to contact. If so, the BCT usually augments the CAB with artillery and Army aviation. The flank guard is responsible for clearing the area from the division main body to the flank guard's designated positions. The CAB must be prepared to operate on a frontage that is greater than for other tactical operations. Usually, the area extends from the forward screen, the forward line of own troops (FLOT) to the rear of the moving formation, tying in with the rear guard. Due to the complexities of this operation, the following detailed discussion of flank guard operations is provided.

COVER

2-103. The *covering force* is a self-contained force capable of operating independently of the main body, unlike a screening or guard force to conduct the cover task. (FM 3-98) The covering force, or portions of it, often becomes decisively engaged with enemy forces. Therefore, the covering force must have substantial combat power to engage the enemy and accomplish its mission. The company team may participate in covering force operations but does not conduct them on its own. The covering force develops the situation earlier than a screen or a guard force. It fights longer and more often and defeats larger enemy forces.

2-104. The CAB is not designed or equipped to conduct a cover on its own. It is likely, however, that the CAB may be assigned a screen or guard (with augmentation) mission in support of an ABCT conducting a cover.

AREA SECURITY

2-105. Area security is a form of security operation conducted to protect friendly forces, installation routes, and actions within a specified area. (FM 3-90-2) Area security is conducted to deny the threat the ability to influence friendly actions in a specific area or to deny the threat use of an area for its own purposes. Area security actions could include area reconnaissance and security of designated personnel, equipment, facilities (including airfield and seaports), main supply routes (MSRs), lines of communication, and critical points. The CAB may be employed as an area security force during stability tasks or tasked with area security of a sensitive site during major combat operations. Area security operations may be offensive or defensive in nature.

2-106. Area security may entail occupying and establishing a 360-degree perimeter around the area being secured or taking actions to destroy threat forces already present. Area security operations may require the execution of a wide variety of supporting operations and tasks. Depending on METT-TC factors a CAB may require augmentation in order to conduct area security effectively. The most significant area of augmentation is likely to be in Infantry to offset the limited personnel present in its tank companies.

AREA SECURITY PROCEDURES

2-107. When conducting an area security mission, the battalion prevents threat ground reconnaissance elements from directly observing friendly activities within the area being secured and prevents threat ground maneuver forces from penetrating the defensive perimeters established by the commander. The commander may direct his subordinate companies to employ a variety of techniques such as observation posts, battle positions, ambushes, and combat outposts to accomplish this security mission. A reserve or quick reaction force (QRF) enables him to react to unforeseen contingencies. Using information collection and intelligence capabilities available to the battalion and BCT, the battalion can execute ambushes and preemptive strikes proactively and with great precision.

2-108. An analysis of METT-TC determines the augmentation for the CAB. Particular consideration is given to the need for aviation, engineers, and artillery. Early warning of threat activity is paramount when conducting area security missions, and provides the commander with time and space to react to threats. Proper information collection planning, coupled with dismounted/mounted patrols and aerial reconnaissance, is key to successful operations, especially when securing fixed sites. Failure to conduct continuous reconnaissance can create a vulnerable seam through which the enemy can execute an infiltration or attack.

2-109. A perimeter is established when a unit must secure an area where the defense is not tied into an adjacent unit. Perimeters vary in shape and distribution of assets based on the results of IPB and METT-TC. A most probable direction of attack may require extra "weighting" of that portion of the perimeter to defeat an attack or infiltration.

2-110. Perimeters typically are divided into company/platoon areas with boundaries and contact points. The battalion establishes a screen by integrating observation posts, ground-based sensors, UAS, HUMINT, and mounted and dismounted patrols. Tanks, BFVs, and other antiarmor weapons systems (attached or organic) are emplaced on high-speed avenues of approach. Infantry and snipers can observe and cover dismounted avenues of approach. UAS and ground-based sensors provide overlapping information collection capabilities at extended distances from the perimeter. Figure 2-8 depicts a CAB conducting area security of a small village.

2-111. Most circumstances will not permit establishment of defined, neat perimeters. When a perimeter is not feasible, the battalion secures the area by establishing a presence and conducting operations throughout the area. Subordinate units may establish perimeters around base camps, critical infrastructure, and high-value assets, while other units conduct operations to establish presence, provide security, assist the conduct of stability tasks, or provide the minimum levels of security, food, water, shelter, and medical treatment as described in ADRP 3-07. The battalion may position reaction forces or disperse its reserve between several secured perimeters. (Refer to FM 3-37 for more information.) Other missions or tasks in support of area security may include the following:

- Screens along zones of separation or other designated areas.
- Route and convoy security of critical LOCs.
- Checkpoint operations to monitor or control movement.
- Demonstrations to maintain an observable presence.

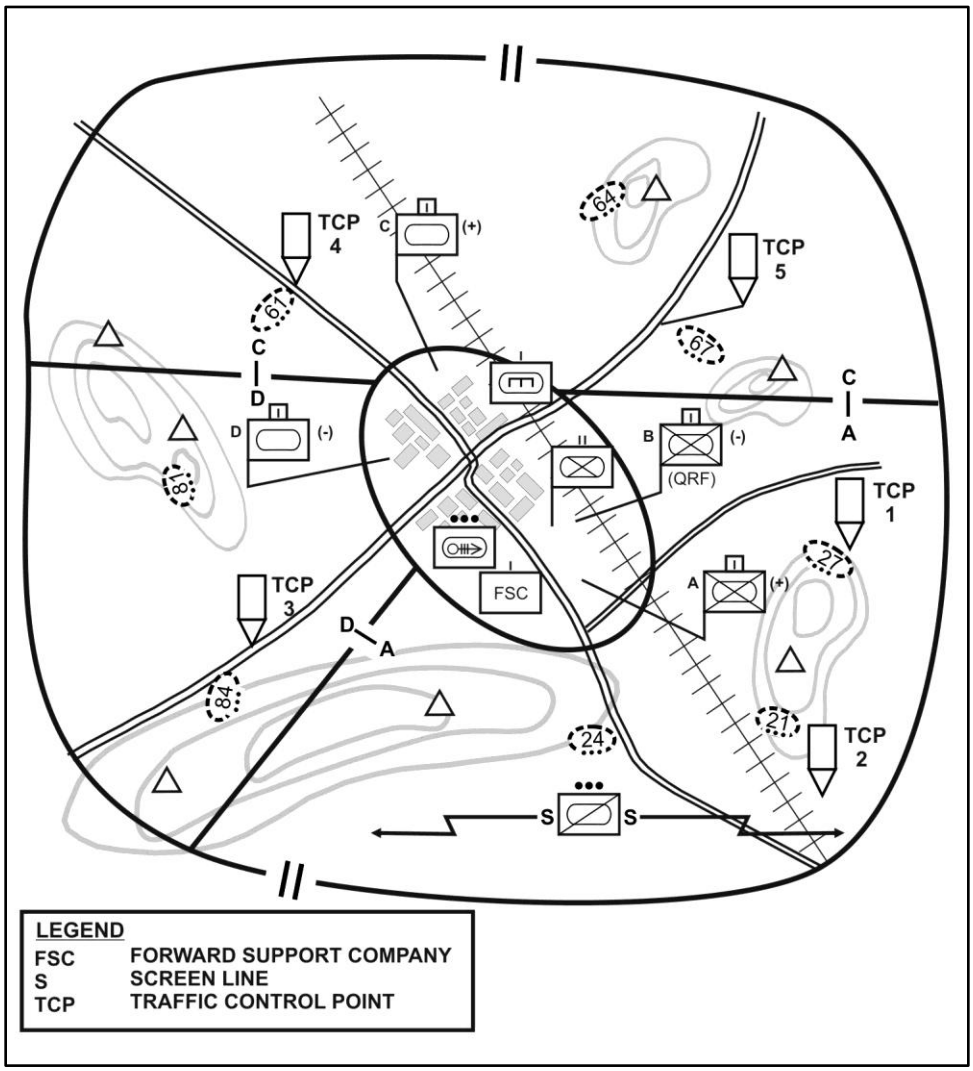

Figure 2-8. CAB conducting area security

Route Security

2-112. Route security is a subset of area security. The purpose of route security is to prevent a threat from attacking, destroying, seizing, containing, impeding, or harassing traffic along the route. It also prevents the threat from interdicting traffic by emplacing obstacles on or destroying portions of the route. Route security operations are defensive in nature and, unlike screen operations, are terrain-oriented.

2-113. Roads and railways may be mined; ambush sites can be located adjacent to the route being secured; or bridges and tunnels can be destroyed by demolitions. Because of the nature of this mission, very long routes may be extremely difficult to secure; however, measures can be enforced to reduce the effect of threat forces. (Refer to FM 34-22 for more information.)

Route Security Methods

2-114. The following discussion highlights three methods that the CAB can use in executing route security. The method the CAB chooses to use depends on the nature of the threat, purpose of the security mission, and characteristics of the route.

2-115. In the first method, the battalion conducts route reconnaissance at irregular intervals to avoid developing a pattern that the threat may exploit. Companies reconnoiter the route, including conducting patrols to either flank. Attached aviation assets or UAS may reconnoiter in advance of ground units or assist in screening flanks. In addition to reconnaissance, companies or platoons may conduct combined arms operations with engineers conducting route clearance, or escort engineers conducting route improvements/maintenance; clearing terrain at potential ambush sites; and repairing damage caused by threat actions.

2-116. The second method entails using an economy of force technique to protect only critical lengths or locations along the route. The battalion or company establishes mutually supporting combat outposts and provides security between them. The battalion or company establishes outposts at critical points to prevent sabotage and to defend against or respond to attacks to interdict the route between outposts. Based on METT-TC, a company can establish one or two combat outposts, and a battalion typically can establish up to eight. Usually, the unit does not secure or patrol the route outside the reach of the combat outposts. A battalion can provide route security by combining this method at two locations or critical points with patrols along the rest of the route. Combat outposts should include a well-defined fire support plan. Battalion mortars or howitzer sections are positioned so they are capable of massing fires in support of both the outposts and the operations between them. Units conduct patrols at irregular intervals between the outposts based on threat trends and recent activities. Patrols must be organized with sufficient combat power to destroy near ambushes and to survive initial threat contact from far ambushes. Each combat outpost maintains a reaction force to respond to threat activity or reinforce patrols.

2-117. The third method is one that the battalion uses if it must take actions to seize or secure terrain needed to permit use along the entire route. The battalion conducts an initial route reconnaissance, with follow-on units establishing a screen to either flank, checkpoints at access points to control access, and combat outposts at critical choke points. As time and forces allow, the battalion establishes defensive positions on key terrain, with subsequent positions prepared to support observation posts on the screen. It also establishes checkpoints at intersections, start points, and release points to monitor and control nonmilitary traffic. Checkpoints may also be established at irregular intervals so that troops can stop and search vehicles and personnel. Checkpoints should be situated along the route or in terrain that does not allow travelers to observe and turn away from the checkpoint holding area. As in the second method, the outposts established at critical choke points include sensors to provide early warning from immediate and surrounding areas. All positions must be defensible, with reinforced fighting positions. (See Figure 2-9a-e.) For this example, the BCT must provide the CAB with specialized combat engineer augmentation to perform the inherent route clearance task associated with route security.

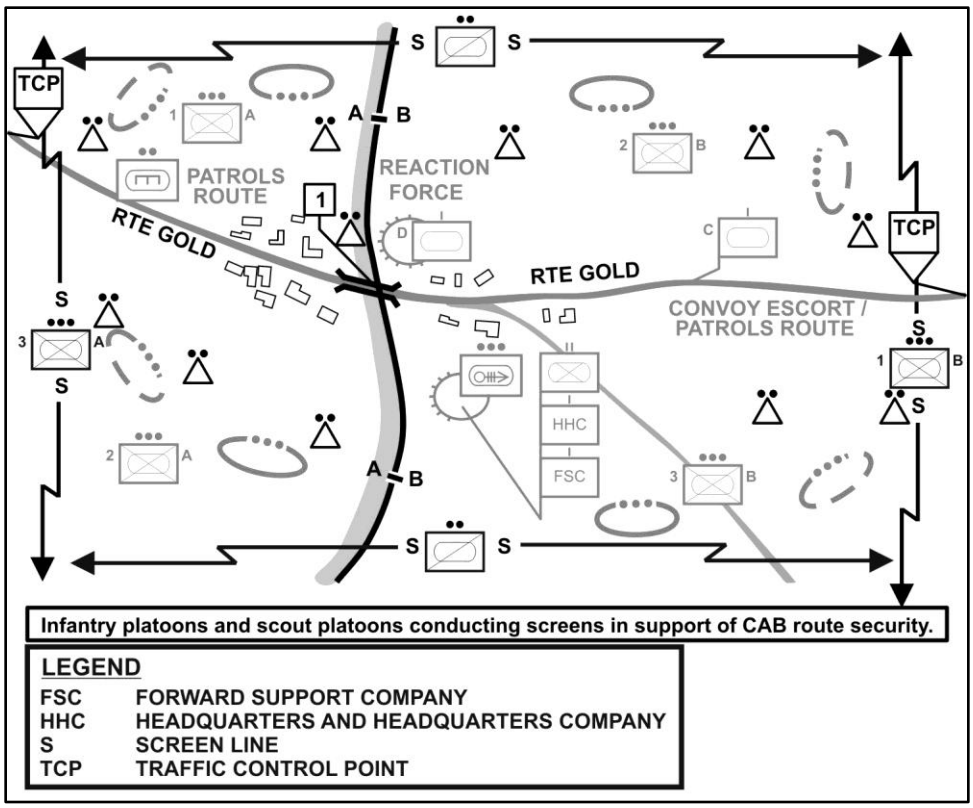

Figure 2-9a. Screen in support of CAB conducting route security

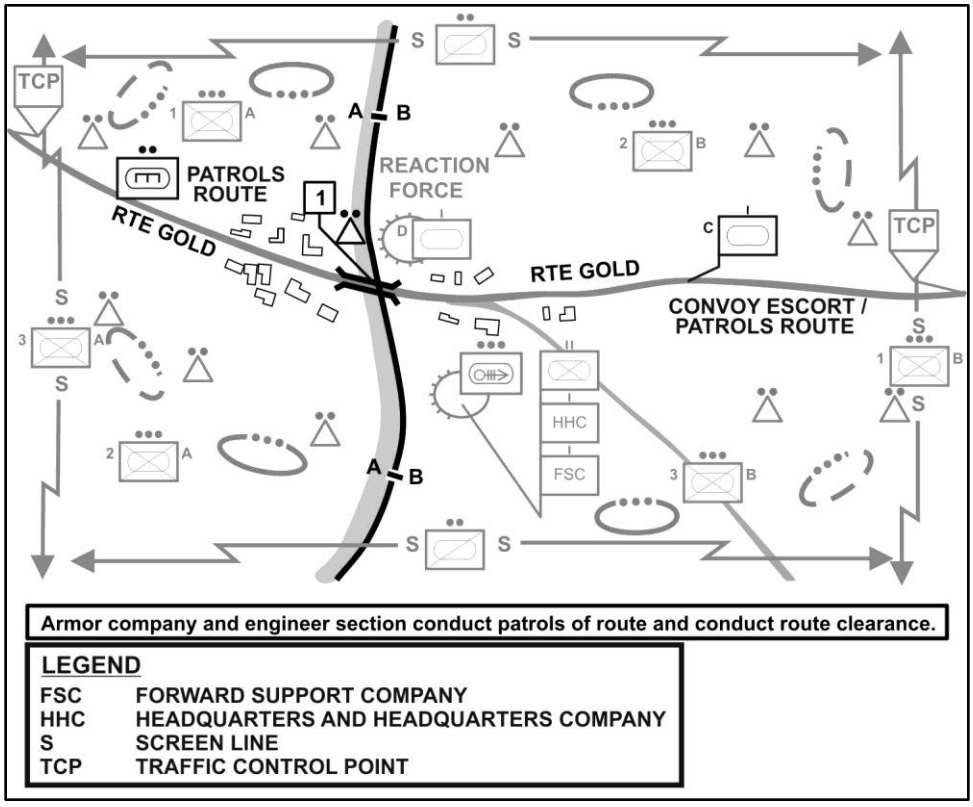

Figure 2-9b. Patrols in support of CAB conducting route security

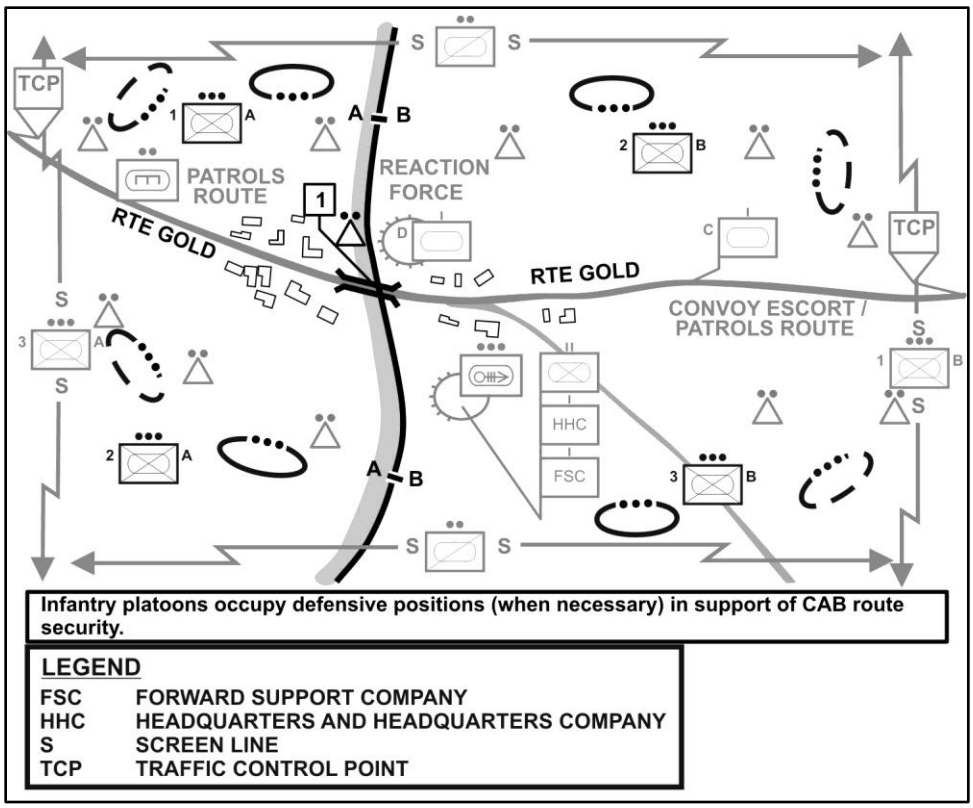

Figure 2-9c. Defensive positions in support of CAB conducting route security

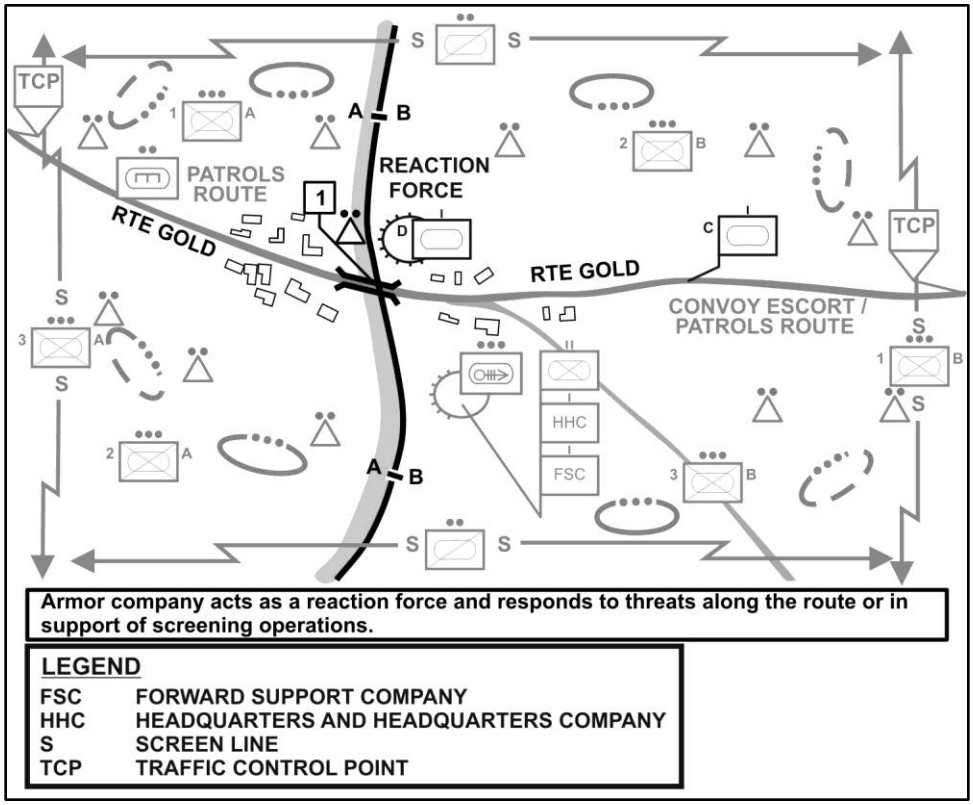

Figure 2-9d. Reaction force in support of CAB conducting route security

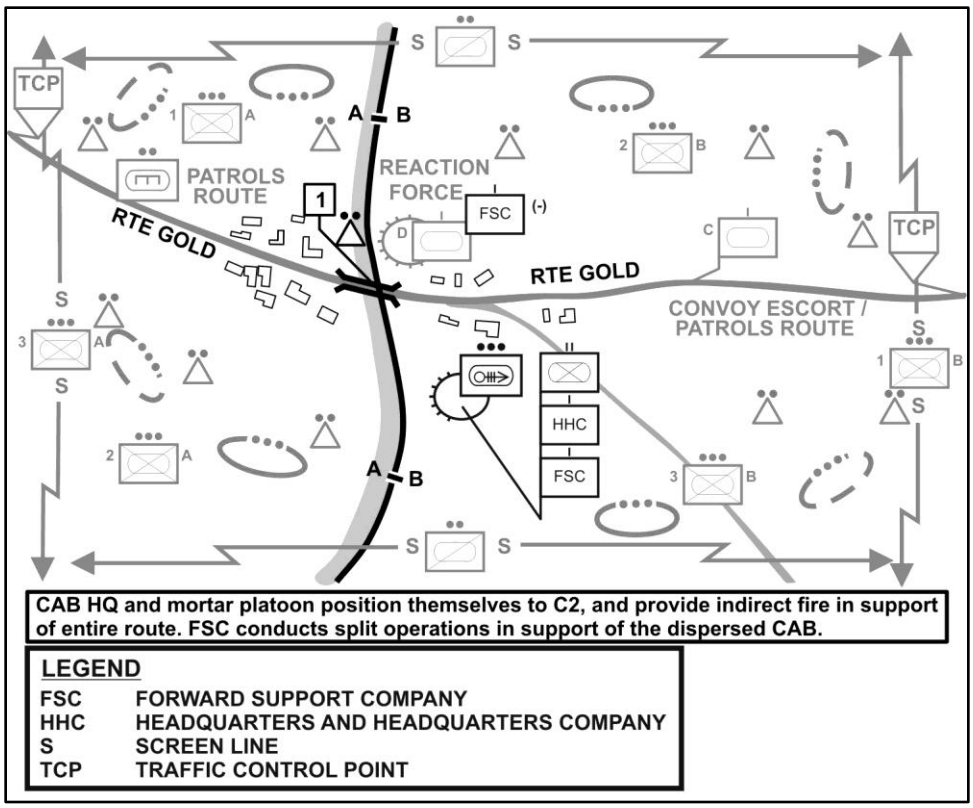

Figure 2-9e. Headquarters and mortars in support of CAB conducting route security

LOCAL SECURITY

2-118. Local security includes measures taken by units to prevent surprise by the enemy. It involves avoiding detection by the enemy or deceiving the enemy about friendly positions and intentions. Local security is an important part of maintaining the initiative. The requirement for maintaining local security is an inherent part of all operations. Units use both active and passive measures to provide local security. Active measures include OPs, patrols and conducting stand-to. Passive measures include camouflage, noise and light discipline, and sensors to maintain surveillance over the area immediately around the unit.

2-119. The company team is responsible for maintaining its own security at all times. It does this by deploying mounted and dismounted observation posts and patrols to maintain surveillance and by employing appropriate OPSEC measures. Besides maintaining security for its own elements, the company team may implement local security for other units as directed by the CAB commander. Examples of such situations include, but are not limited to, the following:

- Provide security for engineers as they emplace/clear obstacles or construct survivability positions in the company team battle position (BP).
- Secure an LZ.
- Establish mounted and dismounted observation posts to maintain surveillance of enemy infiltration and reconnaissance routes.
- Conduct patrols to cover gaps in observation and to clear possible enemy observation posts from surrounding areas.
- Secure HUMINT teams.

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Chapter 3

Offense

The primary purpose of the offense is to defeat, destroy, or neutralize an enemy force, seize terrain and resources, and control populations. A commander will also take offensive actions to deceive or divert the enemy, deprive him of resources or decisive terrain, develop intelligence, or fix an enemy in position. Even in the defense, offensive action may be required to destroy an attacker and exploit success. The key to a successful offensive operation is to identify the decisive point, choose a form of maneuver that avoids the enemy's strength, and masses overwhelming combat power at the decisive point. This achieves a result with respect to terrain, enemy, and time that accomplishes the unit's purpose.

SECTION I – BASICS OF OFFENSE

3-1. The CAB commander gains and maintains the initiative and keeps constant pressure on the enemy throughout his AO. The CAB transitions from one offensive action to another without pausing. Planning and preparing for the next operation and for follow-on operations occur simultaneously with execution of the current action.

CHARACTERISTICS OF OFFENSIVE TASKS

3-2. Success in offensive tasks depends on the proper application of combat power within the fundamental characteristics of the offense: surprise, concentration, tempo, and audacity.

SURPRISE

3-3. A force achieves surprise by attacking the enemy at a time or place and in a manner for which the enemy is not physically or mentally ready. The CAB commander must have a clear understanding of his current state in relation to the enemy and other conditions of his operational environment; a sound understanding of what the end state is for the assigned mission, and a vision of how to move his force from the current situation to the end state. The CAB achieves surprise by—

- Conducting thorough information collection and counter-reconnaissance efforts.
- Striking the enemy from an unexpected direction at an unexpected time through the unique combination of rapid mounted movement and the ability of units to cross any type of terrain.
- Quickly changing the tempo of the operations.
- Being unpredictable.

CONCENTRATION

3-4. A force achieves concentration by massing the effects of combat power. The CAB commander uses the shared common operational picture to maneuver his Armor and mechanized Infantry forces while applying precise indirect fires to overwhelm his foes at the decisive point, and quickly shift from one objective or direction to another. A CAB achieves concentration through—

- Careful planning and coordination based on a thorough terrain and enemy analysis plus accurate, timely reconnaissance.
- Designation of a main effort and allocation of resources to support it.
- Continuous information flow.
- Massing firepower using long-range precision fires and maneuvering Infantry and Armor forces.

TEMPO

3-5. Tempo is the relative speed and rhythm of military operations over time with respect to the enemy. (ADRP 3-0) It is the controlled rate of military action. While a rapid tempo is often preferred, the tempo should be adjusted to ensure synchronization. The goal is to keep pressure on the enemy whether it is done quickly or slowly. The CAB's information systems and mobility capabilities facilitate the synchronization necessary for a rapid execution tempo.

AUDACITY

3-6. Audacity is a simple plan of action, boldly executed. Audacity inspires Soldiers to overcome adversity and danger. Audacity is a key component of any successful offensive action and increases the chance for surprise. Leaders must understand when and where to take risks, plan for them, and execute boldly.

OFFENSIVE TASKS

3-7. An *offensive task* is a task conducted to defeat and destroy enemy forces and seize terrain, resources, and population centers. (ADRP 3-0) There are four offensive tasks, movement to contact, attack, exploitation, and pursuit. The CAB can plan and conduct a movement to contact and an attack independenttly, but can only participate in an exploitation or pursuit as part of a larger operational force.

3-8. As in all military operations, the potential effects on the local populace warrant consideration not only from the potential collateral damage caused by lethal weapon systems and movement of large Armored and tracked vehicles, but also the mental impact on civilians as a result of decisive and lethal engagements in their area.

MOVEMENT TO CONTACT

3-9. *Movement to contact* (MTC) is a type of offensive task designed to develop the situation and establish or regain contact. (FM 3-90-1) It creates favorable conditions for subsequent tactical actions. The commander conducts an MTC when the enemy situation is vague or not specific enough to conduct an attack. Forces executing this task seek to make contact with the smallest friendly force feasible. An MTC may result in a meeting engagement. Movements to contact include search and attack, and cordon and search operations.

3-10. A meeting engagement is a combat action that occurs when a moving force engages an enemy at an unexpected time and place. The commander has five options:

- Attack.
- Defend.
- Bypass.
- Delay.
- Withdraw once making contact with enemy forces.

ATTACK

3-11. An *attack* is an offensive task that destroys or defeats enemy forces, seizes and secures terrain, or both. (FM 3-90-1) Attacks incorporate coordinated movement support by direct and indirect fires. They may be either decisive or shaping operations. Attacks may be hasty or deliberate, depending on the time available for assessing the situation, planning, and preparing. However, based on mission variable analysis, the commander may decide to conduct an attack using only fires. An attack differs from an MTC because enemy main body dispositions are at least partially known, which allows the commander to achieve greater synchronization. This enables the massing of effects of the attacking force's combat power more effectively than in an MTC.

EXPLOITATION

3-12. *Exploitation* is an offensive task that rapidly follows a successful attack and is designed to disorganize the enemy in depth. (FM 3-90-1) Exploitations seek to disintegrate enemy forces to the point where they have no

alternative but surrender or take flight. Exploitations take advantage of tactical opportunities, foreseen or unforeseen. Division and higher headquarters normally plan exploitations as branches or sequels.

PURSUIT

3-13. A *pursuit* is an offensive task designed to catch or cut off a hostile force attempting to escape, with the aim of destroying it. (FM 3-90-1) A pursuit normally follows a successful exploitation. However, any offensive task can transition into a pursuit if it is apparent that enemy resistance has broken down entirely and the enemy is fleeing the battlefield. Pursuits entail rapid movement and decentralized control. Division and higher headquarters normally plan pursuits as branches or sequels.

FORMS OF MANEUVER

3-14. Forms of maneuver are distinct tactical combinations of fire and movement with a unique set of doctrinal characteristics that differ primarily in the relationship between the maneuvering force and the enemy. (FM 3-90-1) The CAB is ideally suited to conduct each form of maneuver against armored and light forces. The commander selects a form of maneuver based upon an analysis of METT-TC, and uses this form of maneuver to develop the best COA. (Refer to FM 3-90-1 for more infromation.) The CAB uses six basic forms of maneuver during an attack:

- Envelopment.
- Turning movement.
- Frontal attack.
- Penetration.
- Infiltration.
- Flank attack.

3-15. The maneuver process normally follows this sequence:

- Movement from the LD to the probable line of deployment (PLD).
- Actions at the PLD, assault position, or FCL.
- Breaching operations.
- Actions on the objective.

MOVEMENT TO THE LINE OF DEPARTURE

3-16. When attacking from positions not in contact, CABs often stage in tactical assembly areas, conduct a tactical road march to attack positions behind friendly units in contact with the enemy, conduct FPOL, and begin the attack.

APPROACH TO THE OBJECTIVE

3-17. The commander and staff plan the approach to the objective to ensure security, speed, and flexibility. They select routes (direction of attack or axis of advance), techniques, formations, and methods (mounted or dismounted) that support actions on the objective best. All leaders must recognize this portion of the battle as a tactical operation, not an administrative movement. The CAB may fight through enemy combat forces, obstacles, artillery strikes, security elements, or possible spoiling attacks to reach the initial objective. The commander employs techniques that avoid the enemy's strength when possible and conceal the battalion's true intentions. The commander tries to prevent the enemy from focusing fires on decisive operations, uses surprise to take advantage of his initiative in determining the time and place of his attack, and when available, uses indirect approaches to strike the enemy from a flank or the rear. As part of setting the conditions for success, the battalion also develops an indirect fires plan, CASEVAC plan, and sustainment plan. Although the unit may not expect contact prior to crossing the line of departure (LD), it must be prepared for it. The approach phase is terminated when the battalion reaches the objective or decisively engages the enemy force.

3-18. While approaching the objective, the CAB must be prepared for any of the eight forms of contact:

- Direct.

- Indirect.
- Non-hostile.
- Obstacles.
- CBRN.
- Aircraft.
- Visual.
- Electronic warfare.

ACTIONS ON THE OBJECTIVE

3-19. During an offensive operation, the CAB's objective may be terrain or force oriented. Terrain-oriented objectives usually require the battalion to seize or secure key or decisive terrain. However, to gain a terrain-oriented objective often requires fighting through enemy forces. Actions on the objective start when the battalion echelons its fires onto the objective. Actions on the objective phase terminate when the unit reaches the limit of advance (LOA) and begins consolidation and reorganization.

CONSOLIDATION AND REORGANIZATION

3-20. The CAB reorganizes and consolidates as required by the situation and mission in order to transition to the next mission. The consolidation and reorganization plan should be as detailed as the assault plan. Consolidation and reorganization tasks are discussed as part of the transition following offensive and defensive tasks.

FOLLOW-ON MISSIONS

3-21. The CAB executes follow-on missions as directed by the higher commander. Follow-on missions can include continuing the attack, supporting a passage of lines for a follow-on force, defending, or participating in an exploitation or pursuit. As populated areas are freed from enemy control, some portion of the force may conduct stability tasks. This could include defeat of insurgents until control of the area reverts to local civil authorities. The battalion develops plans for follow-on missions based on the higher headquarters plan, the higher commander's intent, and the anticipated situation. Follow-on missions or tasks are discussed further during the follow through of offensive and defensive task execution.

SECTION II – MOVEMENT TO CONTACT

3-22. Movement to contact is designed to develop the situation and establish or regain contact using the smallest force possible. It ends when units make contact. The CAB conducts a movement to contact when the tactical situation is not clear or when the enemy has broken contact.

3-23. CABs conduct movement to contact independently or as part of a larger force. A CAB is given a movement-to-contact mission as the lead element of a BCT attack or as a counterattack element of a BCT or division. In the example below, the CAB has been augmented with a combat engineer company to facilitate its mobility and counter-mobility during a movement to contact.

3-24. A CAB assigned a movement to contact assigned an AO, axis of advance, and an objective at a depth to ensure contact with the enemy. The CAB conducts movement to contact in a manner that allows it to maneuver and fully develop the situation, maintain freedom of action, and, if possible, to defeat the enemy once contact is made.

3-25. A meeting engagement is a combat action that occurs when the battalion meets with and engages a sizable enemy force at an unexpected time and place or as the result of a movement to contact. The enemy force may be moving or stationary. The goal, once in contact, is to maneuver quickly to overcome the enemy before he can react.

3-26. This requires the CAB commander to keep his force in a posture ready to react immediately to contact and develop the situation. Subordinate companies must quickly react to contact, develop the situation, report, and gain a position of advantage over the enemy to give the battalion time and space to act effectively. The

battalion's success depends on its subordinate units' initiative and ability to develop the situation effectively. Prompt execution of battle drills at platoon level and below, and standard actions on contact for larger units, can give that initiative to the friendly force. Techniques include:

- When the lead element makes initial contact with the enemy, it must quickly determine the size and activity of the enemy force and avoid being fixed or destroyed.
- If the enemy is moving, the friendly force making initial contact determines the direction of movement and the size and composition of the force. Forward observers place fires on the lead enemy forces. Speed of decision and execution is critical when the enemy is moving.
- If the enemy is stationary, the friendly force determines whether the enemy force is occupying prepared positions and whether they are reinforced by obstacles and minefields. The friendly force attempts to identify antitank weapon positions, the enemy's flanks, and gaps in his positions.
- The battalion advance guard moves quickly to overpower and destroy platoon-sized and smaller enemy security forces. Larger enemy forces normally require deployment of the main body. The advance guard protects the main body by fixing enemy forces larger than platoon size, which allows the battalion main body to retain its freedom to maneuver. Flank security may need to be enhanced through the employment of counter-mobility assets.
- In developing the situation, the advance guard commander maintains pressure on the enemy by fire and maneuver. He probes and conducts a vigorous reconnaissance of the enemy's flanks to determine the enemy's exact location, composition, and disposition. The advance guard immediately transmits this information to the CAB commander and main body units.

3-27. The battalion commander uses this information to develop a plan of action by selecting a maneuver option from the several actions-on-contact options developed during planning:

- Attack.
- Defend.
- Bypass.
- Delay.
- Withdraw once making contact with enemy forces.

ORGANIZATION OF FORCES

3-28. An MTC is organized with a forward security force and a main body as a minimum. The security force must cover the frontage of the battalion axis of advance. (See Figure 3-1.)

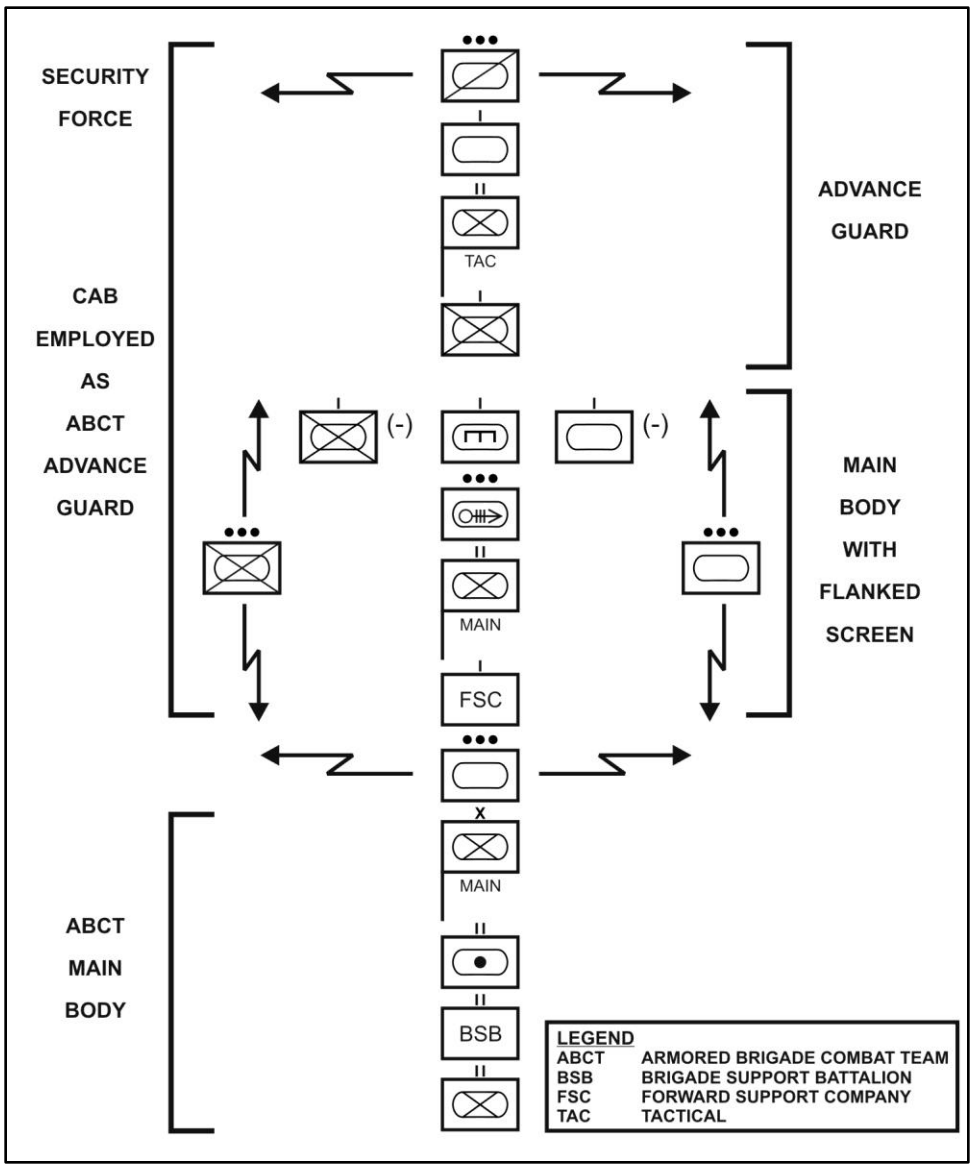


Figure 3-1. CAB movement to contact as part of an ABCT

SECURITY FORCE

3-29. The security force moves as quickly and aggressively as possible, but remains within supporting range of the main body's weapon systems. It is essential to provide early warning and reaction time for the CAB. It destroys small enemy forces or causes the enemy to withdraw before they can disrupt the main body. Usually, the security force for the CAB is the scout platoon. This allows the CAB to locate the enemy with a minimum force forward. Engineers and forward observers are attached to the security force as necessary. The security force normally has initial priority of indirect fires. The mission of the security force is to determine the size, activity, location, and depth of the enemy force.Other tasks include:

- Reconnaissance of routes, bridges, and roads.
- Reconnaissance of obstacles and restrictive terrain.
- Surveillance of named areas of interest (NAIs).
- Identify key terrain.

3-30. The security force must cover the frontage of the battalion axis of advance. The security force avoids decisive engagement, but once it finds the enemy, it must maintain contact and report his activity.

3-31. To provide flank security, platoon-size elements from one or more of the company teams in the battalion main body provide a moving flank screen under company team control. These elements remain at a distance from the main body; this allows the CAB time and space to maneuver to either flank. Flank security elements also operate far enough out to prevent the enemy from surprising the main body with direct fires. Indirect fires are planned on major flank approaches to enhance security. One platoon pulled from the main body may provide rear security, but combat forces are not normally available to perform this mission. The CAB provides its own rear security, assisted by rapid forward movement, which gives the enemy less opportunity to react or reposition forces to attack the battalion.

ADVANCE GUARD

3-32. The advance guard for a CAB is usually a company team. Its composition depends on METT-TC. In open terrain, it may move mounted; in restricted, close, complex, or urban terrain, dismounted movement with vehicles in the overwatch may be a better choice. Engineers follow or are attached to the lead elements. The two lead company teams are task-organized accordingly when a battalion moves in parallel columns.

3-33. The advance guard operates forward of the battalion main body to provide security and ensure its uninterrupted advance. It protects the main body from surprise attack and develops the situation to protect the deployment of the main body when it is committed to action. The advance guard—

- Maintains combat information on the entire CAB, especially the security force.
- Reports enemy contact to the battalion commander.
- Destroys or repels all enemy reconnaissance forces.
- Attempts to penetrate enemy security elements, and reach or identify the enemy main body.
- Prevents the enemy from engaging the main body with direct fires.
- Selects tentative fighting positions for following battalion units.
- Locates, bypasses, or breaches obstacles along the main body's axis of advance.
- Executes tactical tasks, such as fix, seize, or block, against enemy forces to develop the situation for the main body.
- Ensures that all pertinent information is passed to the rest of the battalion.

3-34. The advance guard is the battalion commander's main effort until the main body is committed; then, priority of fires shift to the main body. In planning the movement to contact, each DP should be based on the actions of the advance guard.

MAIN BODY

3-35. The main body contains the bulk of the battalion's combat elements and is arrayed to achieve all-around security. The combat elements of the main body are prepared to deploy and maneuver rapidly to a decisive point on the battlefield to destroy the enemy.

3-36. The main body keys its movement to the advance guard. It maintains information of the advance guard's activities via FM crosstalk or digital communication, primarily FBCB2. The main body, remaining attuned to the advance guard's situation, provides responsive support when the advance guard is committed.

3-37. The use of standard formations and battle drills allows the battalion commander, based on the information available to him through the ABCS, to shift combat power rapidly on the battlefield. Company teams employ the appropriate movement techniques within the battalion formation. Company commanders, based on their knowledge of the commander's intent and their own SU, anticipate the battalion commander's decisions for commitment of the main body and plan accordingly.

CONTROL MEASURES

3-38. The commander controls the MTC by using phase lines, contact points, and checkpoints as required. He controls the depth of the MTC by using an LOA or a forward boundary. The commander could designate one or more objectives to orient the force. These objectives are often terrain-oriented and used only to guide movement.

PLANNING

3-39. A movement to contact is one of the most difficult missions for staffs to plan. The goal is to develop the situation and establish or regain contact with the enemy. Planning must allow for flexibility and promote subordinate initiative. Planning begins by developing the concept of the operation with a focus on making contact with the enemy. This is accomplished by issuing a clear commander's intent, developing a simple concept of operations, and establishing a series of decision points to execute likely maneuver options. Increased emphasis is placed on developing an aggressive and flexible reconnaissance effort that is linked to the commander's PIR, which normally focuses on locating and gathering information about the enemy's strength, disposition, and activities.

MISSION COMMAND

3-40. The effective use and integration of available analog and digital systems enhances the CAB's ability to conduct parallel and collaborative planning with higher and subordinates, as well as ensure a greater understanding of the plan. Many of the digital systems must be stationary or line of sight (LOS) and therefore, are limited during movement. However, during planning and preparation the staff should maximize their use, while preparing for its limited use during execution. The information systems and networks should allow the staff to—

- Maintain continuous lower tactical Internet communication with higher headquarters and subordinate units.
- Establish and maintain upper tactical Internet communications when the main CP is stationary.
- Maintain a digital COP using ABCS with an analog backup and "on-the-move" capability.
- Maintain a parallel and collaborative planning capability.

3-41. One technique that ensures the transfer of the main CP functions goes smoothly is to integrate the planned displacement of the main CP into the decision support template for the CAB. Detailed planning in coordination with the S-3 (scheme of maneuver) and the S-6 (concept of communications support) should enable the battalion to determine the optimal time to displace the main CP. This helps to ensure that the main CP reestablishes adequate communication with both higher and subordinate units during the decisive operation.

3-42. The CAB staff must be prepared and resourced to execute mission command warfighting function tasks regardless of the availability of digital systems. Sometimes the tactical situation precludes the effective use of digital systems. Therefore, it is paramount that the CAB staff train and rehearse analog methods (such as FM voice) of executing mission command over the subordinate units. The staff also can use FM voice communications to meet the reporting requirements of higher headquarters. The main and alternate CPs must have the necessary tools they need to execute mission command warfighting function tasks in an analog environment. Such tools include paper maps, overlays, and status chart boards.

MOVEMENT AND MANEUVER

3-43. Developing a simple scheme of maneuver, issuing a clear commander's intent, and developing plans to execute likely maneuver options that may occur during execution contribute to flexibility and subordinate initiative. Commanders must visualize the AO and employ the right force mix at the right place and time to achieve the desired effect.

3-44. When developing his concept, the battalion commander anticipates where he is likely to meet the enemy, and then determines how he intends to develop the situation that leads to an attack under favorable conditions (hasty attack). The commander must attempt to visualize this process during his mission analysis and take into account his active and passive responses to enemy contact. The commander focuses on determining the battalion's organization and formation that best retains his freedom of action on contact and supports his concept against known or anticipated enemy forces.

3-45. The commander and his staff develop plans for the maneuver options of attack, report and bypass, defend, and retrograde based on the higher commander's intent and the situation. They define the conditions in terms of enemy and friendly strengths and dispositions that are likely to trigger the execution of each maneuver option. They identify likely locations of engagements based on known or suspected enemy locations. The commander states the bypass criteria for the advance guard. He must recognize the loss of tempo created by fighting every

small enemy force encountered with the lead element. The advance guard may attack small enemy forces that it can quickly destroy without losing momentum, but it is best that the advance guard bypass larger or more stubborn enemy forces, and allow their engagement by the main body.

3-46. Areas of likely contact, known enemy positions, and areas that are potentially dangerous to the CAB (such as potential ambush locations, obstacles, and open areas) require close planning consideration. The staff must carefully plan actions for moving through these danger areas quickly and securely.

3-47. Priority of engineer support is typically to mobility, although it may rapidly change to counter-mobility in anticipation of an enemy attack. Engineer teams may join the reconnaissance and security forces to reconnoiter obstacles, based on METT-TC. Additional combat engineers may also travel with the advance guard to assist in assuring the mobility of the advance guard and main body along with gather OBSTINTEL requirements.

3-48. The following are key considerations for the scheme of engineer operations:

- Task-organize engineer forces well forward to support reconnaissance and potential breaching, clearing, or gap crossing operations.
- Ensure the reconnaissance plan integrates the collection of known or templated obstacles and other terrain information, and is focused to verify critical information.
- Maintain the flexibility to mass engineers to breach complex obstacles.
- Plan obstacle control measures and situational obstacles to support flank security. Develop and adjust obstacle locations and triggers for execution based on the battalion's movement and the enemy situation.
- Develop plans for the handover of marked obstacles, lanes, and bypasses.

INTELLIGENCE

3-49. The first consideration for a movement to contact is information collection planning. The BCT plays a major role based on the assets available and its links to division and higher information collection assets. The CAB is one of several elements executing the BCT offensive plan, and the CAB information collection plan must be integrated, synchronized, and coordinated with the BCT Cavalry squadron and other elements executing the BCT information collection plan.

3-50. The first priority is to determine anticipated enemy locations, strengths, and actions. Potential enemy mission, intent, objectives, defensive locations, use of key terrain, avenues of approach and routes, engagement areas (EAs), population, and obstacles are among the items that must be identified early and incorporated into the information collection plan. Various elements within the CAB conduct information collection tasks.

UAS Teams

3-51. UAS teams can prevent large enemy units from surprising the main body. After making contact, UAS teams can maintain contact with ground scouts, reconnoiter elsewhere, or move to a vantage point that avoids decisive engagement. Units must remember to account for the airspace above the CAB's AO. They should be alert for enemy attack aviation and UAS during movements through choke points, bridges, and other restrictive terrain.

3-52. Rapid exchange of relevant information between the CAB, Cavalry squadron, and the BCT is critical. Intelligence-gathering actions result in information dominance and, once established, can convert the movement to contact into an attack.

FIRES

3-53. Priority of fires are allocated to the advance guard. The fire support coordinator in coordination with the BCT S-3, positions field artillery units to provide continuous indirect fires for the moving CAB. Army attack helicopters and CAS may be available to interdict enemy counterattack forces or destroy defensive positions. Given the BCT's emphasis on proactive counterfires and the likelihood for operating in close terrain, the CAB may need to rely on its organic mortars.

3-54. The CAB mortars may be placed under the OPCON of the advance guard, based on METT-TC, to provide responsive fires and obscuration to support initial actions on contact, or may be controlled by the

battalion commander or FSO in support of the entire battalion effort. In either case, it is likely that the advance guard will receive initial mortar priority of fires.

3-55. The following are key considerations for the fire support plan:

- Facilitate responsive and decentralized fires by establishing a clear understanding of the essential tasks for fire support in each phase of the operation. This understanding is critical to the success of the fire support plan. Upon contact, the battalion shifts control of all available fires to the observer who is in the best position to control fires against the enemy.
- Plan targets based on known or suspected enemy locations and danger areas and to support future operations. Refine targets based on the reconnaissance effort as the operation progresses.
- Maximize the use of priority targets along the axis of advance and plan triggers to put these targets into effect and cancel them based on the movement of the battalion.
- Ensure immediate responsive fire support to the lead elements by assigning priority of fires to the security force and the advance guard.
- Synchronize the movement and positioning of artillery, mortar assets with the tempo of the battalion, and the fire support requirements.
- Position observers and forward air controllers (FACs) effectively and maximize the use of lead maneuver forces to call for fires since they often have the best view of the enemy. Observers must understand the essential tasks for fire support for each phase of the operation.

SUSTAINMENT

3-56. Sustainment planners (S-1,S-4, MEDO, XOs, FSC CDR) must be able to anticipate requirements, improvise solutions, and be responsive and continuous. During the operations process, commanders and staff must plan, prepare, execute, and continuously assess sustainment support for the CAB to include attached elements, such as an engineer company.

3-57. The object of sustainment is to provide support as far forward as possible without disrupting operations. The priority is to move Class V forward and to evacuate casualties rearward. The FSC focuses on mobile support, which provides the CAB commander responsive support and reduces support areas to protect. The near-real-time information provided by FBCB2 enhances support.

3-58. The commander and S-4 might determine that the mission requires additional Class III and V support be positioned forward at the combat trains. If the CAB is widely dispersed, the FSC may position resupply of Class III and V forward at logistics release points (LRPs), rather than a centralized combat trains.

3-59. FSC maintenance teams are positioned with companies to perform on-systems repair of combat vehicles. Equipment that cannot be repaired quickly is evacuated to the maintenance collection point (MCP). MCPs should be located on the main axis or main supply routes (MSRs). In addition, the S-4 may request heavy equipment transport to assist in rearward evacuation.

3-60. Medical treatment focuses on stabilization and rapid medical evacuation of patients. Although each maneuver company generally has a ambulance team, the CAB may receive additional wheeled ambulance teams from the medical company (brigade support battalion),to expedite the evacuation of casualties to the BSMC. These ambulances may be held at the BAS or dispersed to ambulance exchange points (AXPs).

3-61. The following are key considerations for the sustainment plan:

- Continuously update the sustainment plan based on status of units and ensure the plan is responsive and flexible enough to support all maneuver options.
- Plan support from initiation of the operation to the final objective or LOA.
- Integrate backup support from the BSB to reinforce the support provided by the FSC. This may include Class III, V, and IX support, medical treatment and ground ambulance teams to provide HSS, and maintenance and recovery teams.
- Consider risks that extended distances create for security of MSRs and sustainment assets based on the potential of undetected or bypassed enemy forces.
- Integrate sustainment with the trains' security plan.
- Develop and maintain an accurate enemy picture behind the lead maneuver elements.

- Plan and coordinate the locations, displacements, and routes of sustainment assets to maintain responsive support.
- Plan and coordinate for aerial resupply.

PROTECTION

3-62. Air defense artillery units are a limited resource. Available air defense artillery resources will be dedicated to the protection of assets that the ABCT commander deems critical to the success of the tactical plan, leaving other assets without dedicated air defense artillery coverage. Units with or without dedicated air defense artillery support must contribute to their own defense against air attack. (Refer to FMs 3-01 and 3-52 and ADRP 3-37 for more information.)

3-63. The commander integrates CBRN considerations into all types of mission planning. Implementing CBRN passive defensive measures may slow the tempo, degrade combat power, and may increase logistics requirements. The following are key considerations for CBRN defense planning:

- Ensure the CBRN reconnaissance platoon within the ABCT is prepared to conduct CBRN reconnaissance tasks.
- Disseminate/report CBRN threats and hazards information immediately throughout the formation once detected.
- Integrate and synchronize the use of obscurants to support critical actions such as breaching or assault.

PREPARATION

3-64. During preparation for movement to contact, the battalion continues to refine the enemy situation based on higher intelligence reports and reporting from the CAB scout platoon. The primary concerns are that the battalion commander and staff receive the latest information and that plans are updated to reflect the changes.

3-65. The battalion commander must ensure that his subordinates understand his intent and their individual missions as new information becomes available. He normally uses backbriefs and rehearsals to ensure his intent is understood and all actions are integrated and synchronized. Simple, flexible plans that rely on TACSOPs, and are rehearsed repeatedly against various enemy conditions, are essential to success.

INSPECTIONS

3-66. The battalion commander inspects subordinate unit preparations to ensure they are consistent with his intent and concept of operations. He emphasizes subordinate plans to move through danger areas, conduct actions on contact, and transition into a maneuver option. The battalion commander ensures each subordinate force understands its assigned mission during the movement to contact and the potential maneuver options that may develop during execution.

REHEARSALS

3-67. The battalion's leaders rehearse the plan against a wide range of likely enemy COAs that would cause the battalion to execute various maneuver options at different times and locations. The goal of rehearsals is to help prepare commanders to identify decision points that may arise during execution. This promotes flexibility and agility while reinforcing the commander's intent. The commander seeks to rehearse the operation from initiation to occupation of the final objective or LOA, but due to time constraints, the commander prioritizes the maneuver options and enemy COAs to be rehearsed based on the time available. The focus of the rehearsal is locating the enemy, developing the situation, executing a maneuver option, and exploiting success. The rehearsal must consider the potential of encountering stationary or moving enemy forces. Other actions to consider during rehearsals include:

- Actions to cross known danger areas.
- The advance guard making contact with a small enemy force.
- The advance guard making contact with a large force beyond its capabilities to defeat.

- The advance guard making contact with an obstacle the reconnaissance force has not identified and reported.
- A flank security force making contact with a small force.
- A flank security force making contact with a large force beyond its capability to defeat.
- Bypass criteria and reporting requirements.
- Transition into a maneuver option.

3-68. The type of rehearsal is proportional to the amount of time to plan and prepare for execution. Ideally each type of rehearsal is conducted, but the CAB commander will almost always conduct backbriefs with his subordinate commanders and staff. The combined arms and support rehearsal can be done in combination with the backbrief with time permitting. The battle drill or standard operating procedure (SOP) rehearsal are usually conducted at platoon and below. (Refer to FM 6-0 for more information.)

3-69. The six techniques for rehearsals are network, map, sketch map, terrain model, reduced force, and full dress. These are listed in order of the amount of time, resources, leadership participation, and security risk from least to greatest in order to conduct the rehearsals. Because of the unknowns associated with respect to enemy during a movement to contact, the execution of rehearsals during preparation is vital to success. (Refer to FM 6-0 for more information.)

EXECUTION

3-70. The execution of offensive tasks generally follow a five-step sequence listed below:

- Gain and maintain enemy contact.
- Disrupt the enemy.
- Fix the enemy.
- Maneuver.
- Follow through.

3-71. This sequence is for discussion purposes only and is not the only way of conducting these offensive tasks. The five steps used in this publication to illustrate the execution of offensive tasks actually tend to overlap each other during the conduct of offensive actions. Normally the first three of these steps are shaping operations or supporting efforts, while the maneuver step is the decisive operation or main effort. Follow through is normally a sequel or a branch to the plan based on the current situation.

3-72. During the movement to contact, the battalion moves rapidly to maintain the advantage of an appropriate tempo. However, the battalion commander must balance the need for speed with the requirement for security. This decision is based on the effectiveness of the information collection effort, friendly mobility, effects of terrain, and the enemy's capabilities.

3-73. The COP should allow close tracking of the movement and location of battalion units. The battalion CP continually monitors the location and movement of the security forces through voice reports or FBCB2. This ensures adequate security for the main body, and ensures the security forces are within supporting range of the main body, mortars, and artillery. The battalion CP also controls the movement of the FSC, adjusting its movements to meet support requirements, avoid congestion of routes, and ensure responsiveness.

GAIN AND MAINTAIN ENEMY CONTACT

3-74. The battalion maintains continuous contact with an enemy force once located by the reconnaissance or security element. Reconnaissance assets assist friendly forces by guiding them along the best routes to engage the enemy. As contact develops, reconnaissance assets at every level report enemy actions and battle damage assessment (BDA).

3-75. The battalion destroys small enemy forces with a combination of fire and maneuver. Depending on the battalion commander's bypass criteria, the advance guard may fix small enemy forces identified by the security force. Once it fixes the enemy, the security force leaves a small combat force to contain the enemy until the advance guard or main body can destroy it.

3-76. The advance guard maintains contact with the scout platoon to coordinate combat actions and exchange relevant information. As the scout platoon locates enemy positions, it hands these locations off to the advance guard. In some cases, elements of the scout platoon maintain contact with the enemy and guide the advance guard maneuver forces. Regardless of the technique used, units should rehearse these actions and closely coordinate them during execution to prevent fratricide and confusion.

DISRUPT THE ENEMY

3-77. Once making contact, the main body commander brings the overwhelming combat power, and shock effect of his Armor and mechanized Infantry onto the enemy to prevent him from conducting either a spoiling attack or organizing a coherent defense. The security force continues to identify and report gaps in the enemy's defenses. The commander uses his information collection assets to gain as much information as possible about the enemy's dispositions, strengths, weaknesses, capabilities, and intentions. As more intelligence becomes available, the main body commander attacks to destroy or disrupt enemy command and control centers, fire control nodes, and communication nets. The main body commander conducts operations to prevent enemy reserves from moving to counter his actions.

FIX THE ENEMY

3-78. The goal of the security force is to prevent enemy security and main body forces from maneuvering against his main body by fixing them. Therefore the commander must provide the security force appropriate levels of organization, size, and combat power to defeat or fix the enemy without deploying the main body. The order’s intelligence summary and information collected prior to and during planning are the major factors that determine the size of the security force along with the rest of the organization for the movement to contact.

3-79. The commander augments the security forces ability to fix through the use of aerial maneuver, fire support assets, situational obstacles to counter-mobility, and electronic warfare systems. The priorities are typically to attack enemy forces in contact, enemy command and control and fire direction control facilities, enemy fire support assets, and moving enemy forces not yet in contact, such as follow-on forces and reserves. These priorities vary with the mission variables/factors of METT-TC. Attack helicopters and close air support fixed-wing aircraft working in joint air attack teams are ideally suited to engage the enemy throughout the depth of the area of operations if suppression of enemy air defenses can reduce aircraft risk to an acceptable degree.

MANEUVER

3-80. Timely and accurate intelligence facilitate the battalion commander’s selection of the appropriate maneuver option. Usually, the CAB commander makes the final decision for execution of a maneuver option based on the progress of the initial engagement of the advance guard. The battalion movement to contact generally ends with the commitment of the main body. The following paragraphs provide a general description of the options that may develop after a movement to contact

Maneuver Options

3-81. If the security force cannot overrun the enemy with a frontal attack, the commander retains tempo by quickly maneuvering his main body to conduct a penetration, flank attack, or envelopment. To conduct a successful penetration, attacking units penetrate on a narrow front and drive deep into the hostile position to attack enemy reserves, artillery, command and control nodes, and lines of communication.To conduct an envelopment, the security force fixes the enemy, while the commander focuses on attacking the enemy's flanks and rear to surprise and envelop him before he can prepare to counter these actions. If rapid forward movement is required and the BCT commander has authorized bypass of enemy forces, the CAB can bypass. The higher commander establishes bypass criteria that allow the battalion to report and bypass enemy forces of a specific size. When an enemy force meets the bypass criteria, the battalion fixes the enemy force and leaves a small force to maintain contact while the remainder of the battalion continues the advance. Once bypassed, the destruction of the enemy force becomes the responsibility of the battalion’s higher commander.

3-82. Bypassed forces present a serious threat to forces that follow the maneuver elements, especially sustainment elements. It is imperative that the battalion CP distributes the location and strengths of enemy forces throughout the CAB AO to enable following units to move around these threats.

3-83. Ambush is effective against a moving or infiltrating force that is not aware of the presence of the battalion. Instead of immediately engaging the enemy, the advance guard (and possibly the entire battalion) moves into hasty attack-by-fire positions oriented on an EA. This option is enabled by accurate information updates and the speed and accuracy with which FRAGORDs and other instructions can be developed and passed. When most of the enemy is in the EA, the battalion uses massed direct and indirect fires and maneuver to attack the enemy.

3-84. The commander directs an attack when the CAB has greater combat power than the enemy or when he assesses the CAB can reach a decisive outcome. The CAB commander quickly develops a scheme of maneuver and concept of fires for the attack and distributes orders to subordinate companies. The commander employs fires, CAS, and situational obstacles. He controls the movement, deployment, and possible changes to the task organization of the CAB forces. The envelopment is normally the most desirable form of maneuver and is used when there is sufficient maneuver space. A penetration is normally used against a stationary enemy force that does not have an assailable flank, such as one in a perimeter defense. After a successful attack, the CAB may continue the movement to contact or execute other missions as directed by the BCT commander.

3-85. The commander directs a defense when the CAB has insufficient combat power to attack or when the enemy's superior strength forces the CAB to halt and prepare for a more deliberate operation. The CAB maneuvers to the best available defensible terrain, either to the front or to the rear. The commander may direct the advance guard or another security force to delay an enemy attack to provide time for establishment of the battalion defense. Companies quickly deploy, establish security, array forces, and develop fire and obstacle plans. Special emphasis is placed on flank protection and adjacent unit coordination. As the enemy attacks, the CAB commander repositions and maneuvers forces to defeat the enemy through massed fires, situational obstacles, and counterattacks. The commander seeks to defeat an attacking enemy force and create the opportunity for offensive action. In some cases, the CAB may need to retain its position to allow the BCT commander time to commit additional forces.

3-86. The commander directs a retrograde when the CAB lacks the combat power to attack or defend, improve a tactical situation, or prevent a worse situation from developing. If other units are behind the CAB, planning and coordination for RPOL is necessary. Lead elements of the CAB establish initial defensive positions while nonessential mobility, protection, and sustainment assets reposition to the rear. Indirect fires, obstacles, and obscurants are employed to assist forward elements with disengagement and displacement. Battalion elements in contact avoid becoming decisively engaged.

Actions at Obstacles

3-87. Obstacles pose a significant threat to the CAB's momentum. Once a battalion element detects an obstacle, it immediately distributes its location and description on FM radio or digitally. The battalion quickly seeks a secure bypass. If a bypass is available, the unit in contact with the obstacle exploits and marks the bypass; it also digitally distributes the route of the bypass around the obstacle as soon as possible. Usually, enemy forces cover obstacles with fires. Units should approach all obstacles and restrictive terrain with the same diligence with which they approach a known enemy position.

3-88. When the CAB must breach, it takes the steps to execute the breaching fundamentals of suppress, obscure, secure, reduce, and assault (SOSRA) to create a breach lane and continue the movement to contact. Engineer forces from the main body support the breach effort by creating lanes, improving the marking of lanes, and guiding the main body through the obstacle. Should the unit anticipate breaching or gap crossing operations, it will require engineer augmentation to support either hasty or deliberate operations.

3-89. When mobility degrades due to movement of dislocated civilians, CA, MP or military information support operations assets may be employed to redirect the civilians away from the route of advance. The enemy covers this type of obstacle with fires to degrade clearing efforts.

FOLLOW THROUGH

3-90. After a successful attack, the main body commander resumes the movement to contact if the location of the enemy main body is still unclear and the limit of advance has not been reached or the commander transitions to the appropriate task—deliberate attack, a defense, or retrograde—for the existing tactical situation. The CAB maintains contact and attempts to exploit its success.

SEARCH AND ATTACK

3-91. Search and attack is a technique for conducting movement to contact that shares many of the characteristics of an area security mission. A commander employs this form of a movement to contact when the enemy is operating as small, dispersed elements whose locations cannot be determined to targetable accuracy by methods other than a physical search, or when the task is to deny the enemy the ability to move within a given area.

3-92. The search and attack are normally conducted at battalion and company level. Since the CAB has a combination of Infantry and Armored elements, it can be employed anywhere in the world in many environments, and face regular and irregular threats alike, it is worth discussing the fundamental techniques to conduct a search and attack. The search and attack is conducted for one or more of the following:

- **Destroy the enemy.** Render enemy units in the AO combat-ineffective.
- **Deny the area.** Prevent the enemy from operating unhindered in a given area (such as any area the enemy is using for a base camp or for logistics support).
- **Protect the force.** Prevent the enemy from massing to disrupt or destroy friendly military or civilian operations, equipment, property, and key facilities.
- **Collect information.** Gain information about the enemy and the terrain to confirm the enemy COA predicted as a result of the IPB process.

ORGANIZATION OF FORCES

3-93. Forces organized into reconnaissance, fixing, and finishing forces. In a CAB level search and attack, companies would be assigned AOs. The reconnaissance forces can consists of scout, Infantry, sniper, aviation, and EW assets. Each company might designate its own reconnaissance forces, or they may be provided by the battalion depending on METT-TC. Either way, it's critical that all forces have an understanding of the common operational picture and that communications and updates are continuous in order to avoid fratricide.

EXECUTION

3-94. The reconnaissance force gains and maintains contact with the enemy while the fixing force blocks routes to isolate the enemy, by preventing its movement, or reinforcement. The fixing force can also attack to disrupt the enemy until the finishing force can maneuver to bring its combat power to bear on the enemy. BFVs, tanks or a combination of them can serve as the fixing and finishing forces. It's also possible to utilize the movement, or positioning of tanks as part of a deception plan to divert attention, while reconnaissance efforts are undertaken.

3-95. With companies operating within their own AOs they may also be called upon to conduct their own search and attack efforts in their AOs within their capability. The commander should dedicate mortar support to the most likely threat and plan for brigade support by fires utilizing TRPs. Other control measures for a search and attack are an AO, objectives, checkpoints, and contact points. (Refer to FM 3-90-1 for more information.)

CORDON AND SEARCH

3-96. The cordon and search is a technique of conducting a movement to contact that involves isolating a target area and searching suspected locations within that target area to capture or destroy possible enemy forces and contraband. (FM 3-90-1) It is frequently applied during stability tasks for a variety of reasons to include capturing personnel, locating weapon caches, gathering combat information and intelligence, or securing key facility and terrain. The four key elements to the cordon are the command, security, search or assault, and support. Most cordon and search missions executed at battalion level and below. (Refer to FM 3-06/MCRP 3-31.4B for more information.)

3-97. As discussed above, leaders must carefully consider the local populace during the execution of stability tasks. This is even more prevalent with forcible entry and the offensive nature of cordon and search missions, which involve limiting freedom of movement and searching dwellings. These actions provide a clear potential for negative consequences; therefore, organizing cordon and search elements requires extensive mission

tailoring and consideration of mission ramifications. Commanders must always be prepared for a civil disturbance.

TASK ORGANIZATION

3-98. In a built-up area, the CAB commander generally divides the area to be searched into zones, and assigns a search party its' own battle space. The cordon consists of two security elements: an outer cordon and an inner cordon. The outer cordon is usually the responsibility of the CAB, as it requires a considerable amount of assets to control it effectively. The outer cordon consists of a security element that encircles the area to prevent entrance and exit, and to secure open areas. When necessary, the security element is augmented with the necessary enablers (based on METT-TC) such as linguists and CA specialists. The inner cordon is established by the unit assigned the search mission. The higher headquarters must also establish a quick reaction force element to assist either element, as required. (See Figure 5-1.)

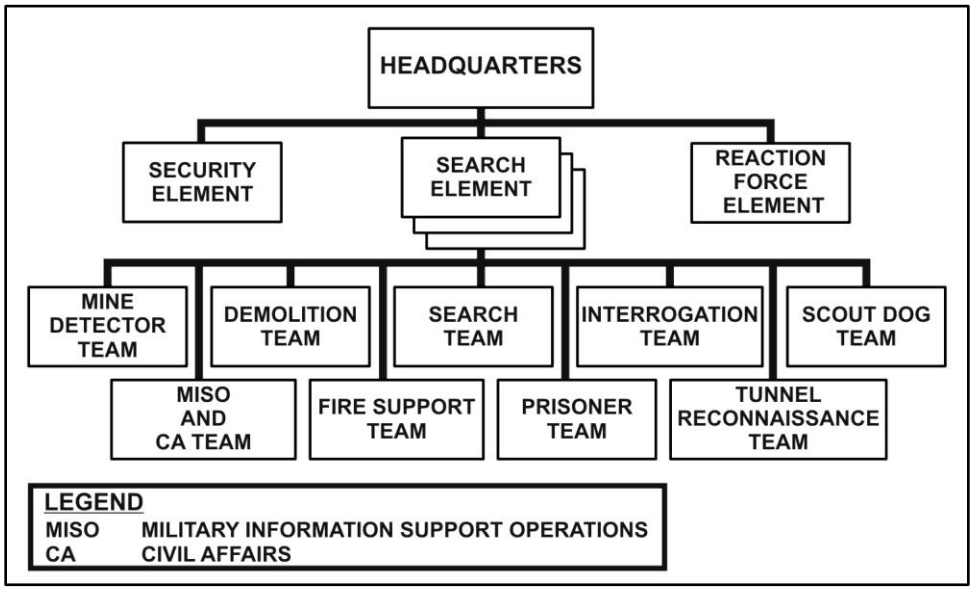


Figure 3-2. Typical organization for cordon and search operations

Note. These teams are examples only. Civilians may support any or all teams employed.

3-99. When conducting a cordon and search mission, the CAB may receive assets from higher headquarters. These same assets will also aide when conducting a cordon and search to support exploitation operations. These assets can include:

- Information collection assets from the Cavalry squadron and the military intelligence company.
- Mine detection or demolition support from engineer units.
- Interrogation, translator, and HUMINT support from the military intelligence company.
- Military information support operations (such as a loudspeaker) and other CA support from attached CA units.
- Electronic warfare support (such as Prophet) from the military intelligence company.
- LNOs to assist with host-nation interaction.
- Quick reaction force.

3-100. The quick reaction force is a mobile force positioned in a nearby area ready to help the search and security elements, if they meet resistance beyond their ability to handle. The reaction force can replace or reinforce either of the other two elements if the need arises. Reaction forces are often a section or platoon size element depending on METT-TC. These elements can also support medical evacuation and vehicle recovery operations. In short the QRF should be prepared to assist with multiple contingencies as prescribed by the commander.

ESTABLISHING THE CORDON

3-101. An effective inner and outer cordon is critical to the success of the search effort. (See Figure 5-2.) Cordons are designed to isolate the area to be searched in order to protect the forces conducting the operation. Leaders should always plan for checkpoints and or roadblocks, patrols, aerial surveillance, engineers, military information support operations, search and entry teams, MPs, and documentation teams. Integration of all warfighting function is critical to success. In remote areas, the CAB can utilize long range precision fires from tanks, BFVs and snipers to establish the cordon without being detected. The use of limited visibility aids in the establishment and security of the cordon but makes it difficult to control.

3-102. Deployment for the search should be rapid, especially if the enemy is still in the area to be searched. Ideally, the entire area should be surrounded at once. Observed fire covers any gaps. The security element surrounds the area while the search element moves in. Members of the security element orient mainly on people evading the search in the populated area. The security element can also cut off any insurgents trying to reinforce others within the area, isolating the search area internally and externally. Checkpoints and roadblocks are established. Subsurface routes of escape in built-up areas, such as subways and sewers, should also be searched and blocked.

3-103. The CAB must enforce the ROE and should develop plans to handle detained personnel. Infantry can also conduct searches and assist in detaining suspects, under police supervision; their principal role, however, is to reduce any resistance that might develop and to provide security for the operation. Use of force is kept to a minimum.

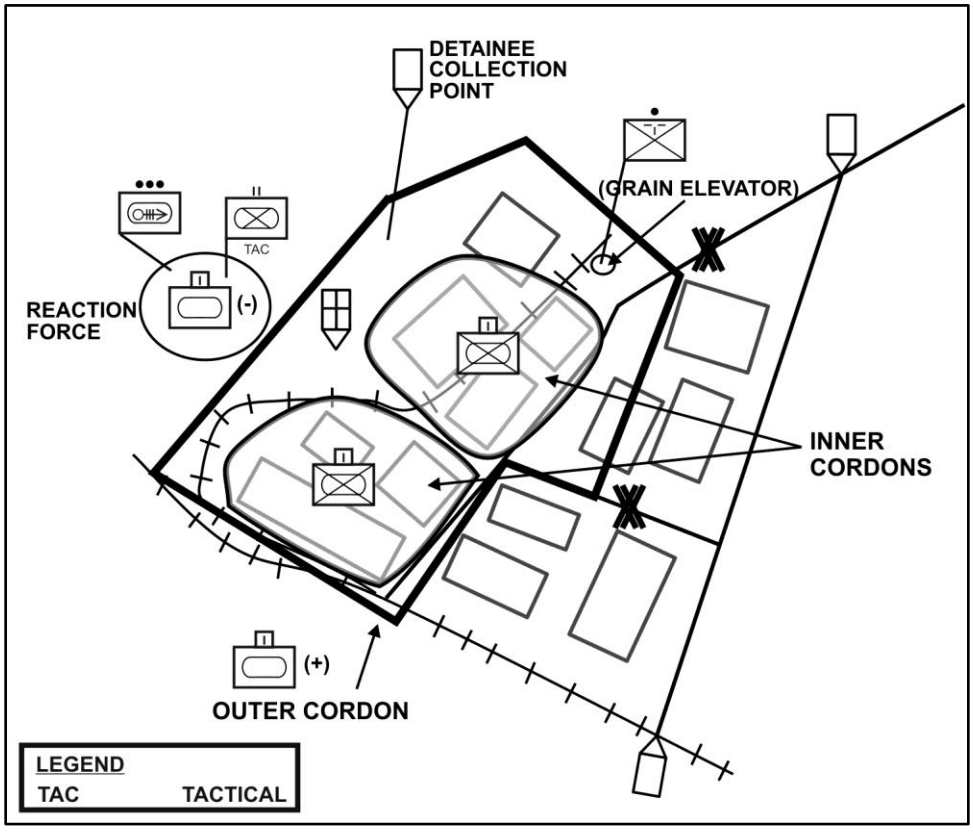


Figure 3-3. Establishing the outer and inner cordon

Entering Buildings

3-104. There are various methods used to enter buildings on the objective, the method of choice depending on the factors of METT-TC. Some of those methods include:

- Conduct a dynamic entry into a building using demolition, ballistic, or mechanical breach, and then conduct a thorough search.
- Conduct a dynamic entry using an authorized mechanical breach; then choose a search method based on the intelligence found on site.
- Conduct a passive entry with a cursory search only.
- Conduct a "tactical callout." Use a megaphone to call personnel out of the building, and then conduct a search of the objective using an appropriate search method.

CONDUCTING THE SEARCH

3-105. Units conduct a search of a built-up area with limited inconvenience to the populace. The search should inconvenience the populace enough for them to discourage insurgents and sympathizers from remaining in the locale but not enough to drive them to collaborate with the enemy. A large-scale search of a built-up area is a combined civil police and military operation. Such a search should be planned in detail and rehearsed while avoiding physical reconnaissance of the area just before the search. Aerial photographs can provide information needed about the terrain. In larger towns or cities, the local police might have detailed maps showing relative sizes and locations of buildings. As with any Army operation, mission analysis is critical. For success, the search plan must be simple and the search conducted swiftly. The search element is organized into teams. These teams can include personnel and special equipment for handling prisoners, tactical questions, documentation (using a recorder with a camera), demolitions, military information support operations and civil affairs, mine detection, fires and effects, employment of scout dogs, and tunnel reconnaissance.

Search Considerations

3-106. Misuse of search authority can adversely affect the outcome of operations. Therefore, Soldiers must conduct and lawfully record the seizure of contraband, evidence, intelligence material, supplies, or other minor items in order for these things to be of future legal value. Proper use of authority during searches gains the respect and support of the people. Some considerations include:

- Authority for search operations is carefully reviewed.
- Search teams have detailed instructions for handling controlled items.
- Language difficulties can interfere when U.S. forces conduct search operations involving the local populace. The U.S. units given a search mission are provided with interpreters as required.
- The CAB conducts search operations with a tempo that that allows for an effective search but rapidly enough to prevent the enemy from reacting to the threat of the search.
- Soldiers use minimum essential force to eliminate any active resistance encountered.
- Searchers can return to a searched area after the initial search to surprise and eliminate insurgents or their leaders who might have either returned or remained undetected during the search.
- The unit should develop plans for securing the search area and for handling detained personnel.
- Disrupt or stop smuggling operations.

Search Methods

3-107. **Assemble inhabitants in a central location if they appear to be hostile.** This method provides the most control, simplifies a thorough search, denies insurgents an opportunity to conceal evidence, and allows for detailed interrogation. Depending on the objective of the search, a personnel search team may be necessary in this central location. This method has the disadvantage of taking the inhabitants away from their dwellings, and encouraging looting, which, in turn, produces ill feelings from the inhabitants. The security element is responsible for controlling the inhabitants. The search element may escort individuals back to their dwellings to be present during the search, or it may leave them in the central location.

3-108. **Restrict inhabitants to their homes.** This prohibits movement of civilians, allows them to stay in their dwellings, and discourages looting. The security element must enforce this restriction. The disadvantages of this method are that it makes control and interrogation difficult, and it gives inhabitants time to conceal evidence in their homes

3-109. **Control the heads of the households.** The head of each household is told to remain in front of the house while everyone else in the house is brought to a central location. The security element controls the group at the central location and provides external security. During the search, the head of the household accompanies the search team through the house. Looting is reduced, and the head of the household sees that the search team steals nothing.

Searching a House

3-110. The object of a house search is to look for controlled items and to screen residents to determine if any are suspected insurgents or enemy sympathizers. A search party assigned to search an occupied building should consist of at least one local police officer, a protective escort for local security, and a female searcher (if the building has female inhabitants). If inhabitants remain in the dwellings, the protective escort must isolate and secure the inhabitants during the search. Escort parties and transportation must be arranged before the search of a house. Forced entry might be necessary if a house is vacant or if an occupant refuses to allow searchers to enter. If the force searches a house containing property while its occupants are away, it should secure the house to prevent looting. Before U.S. forces depart, the commander should arrange for the community to protect such houses until the occupants return.

Aerial Search Operations

3-111. Search units mounted in armed helicopters take full advantage of the mobility and firepower of these aircraft. Air mobile combat patrols conducting an aerial search reconnoiter an assigned area or route in search of enemy forces. When a patrol locates an enemy force, the patrol may engage it from the air, or may land and engage it on the ground. This technique has little value in areas of dense vegetation or when a significant man-portable air defense threat is present. Air mobile combat patrols should be used only when sufficient intelligence is available to justify their use. Even then, ground operations should be used along with such patrols.

CAPTURING PERSONNEL AND EQUIPMENT

3-112. Commanders must carefully weigh the value of tactically questioning detainees at the point of capture against the thorough questioning at a safe haven. Although Soldiers on the ground desire to gather and act on timely intelligence, there might be far-reaching damage to an ongoing investigation by military intelligence or host-nation counterinsurgency operations. Often military intelligence and host-nation representatives can accompany units conducting cordon and search to provide advice to on-site commanders.

3-113. Soldiers should treat any enemy material found, including propaganda signs and leaflets, as if it is booby-trapped until inspection proves it safe. Underground and underwater areas should be searched thoroughly. Any freshly excavated ground could be a hiding place. Soldiers can use mine detectors to locate metal objects underground and underwater. Certain kinds of equipment (for example, computers and cell phones) should not be exploited at the point of capture. Instead, the CAB should arrange for quick removal of captured material to military intelligence units with the capability to handle exploitation properly.

ROADBLOCKS AND CHECKPOINTS

3-114. Roadblocks, traffic control points, and checkpoints are among the most visible actions performed during stability tasks. Checkpoints offer a myriad of planning concerns. There is a high potential for junior leaders and Soldiers to make decisions with international importance in essence becoming "junior ambassadors." Therefore, establishment and continual analysis of standard operating procedures is critical to ensuring equity and support.

3-115. The ability to establish roadblocks and checkpoints is an important aspect of movement control and area denial. Establish roadblocks in locations where approaching traffic cannot observe them until it is too late to withdraw and escape. When possible, roadblock locations must be periodically relocated in order to mitigate bypassing and targeting by enemy forces. Narrow defiles, tunnels, bridges, sharp curves, and other locations that channel traffic are the preferred sites. Constructed, nonexplosive obstacles slow traffic, restrict it to a single lane, and bring it to a halt. (See Figure 5-3.)

3-116. Roadblocks and checkpoints help prevent smuggling operations and stop the movement of known or suspected insurgents. They should be manned by host-nation police and observed by United Nation monitors (when appropriate) to stop vehicles and pedestrians, and conduct searches as required. Either host country or U.S. Army combat forces defend these roadblocks and checkpoints from enemy attack. If police strength is insufficient for the number of positions required, the Army can operate them.

3-117. Units establishing and manning checkpoints must have knowledge of civil authorities, factional boundaries, significant cultural sites, linguist use, and knowledge of the local populous and geography. Further, it is imperative that leaders who are responsible for checkpoints appraise higher headquarters of problems and render specific recommendations for mission accomplishment. (Refer to ATP 3-21.10 and FM 3-19.4 for more information.)

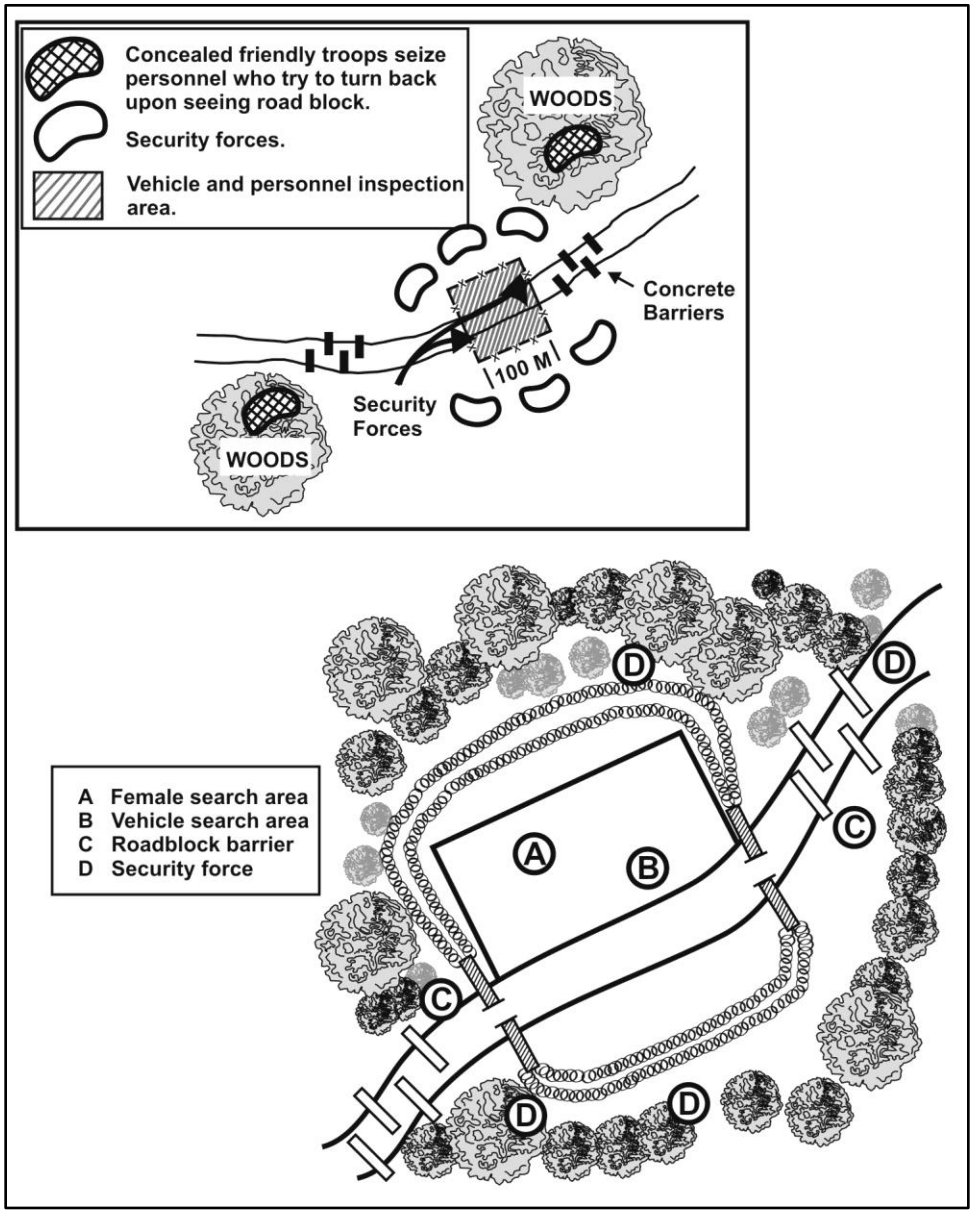


Figure 3-4. Physical layout of a checkpoint

SECTION III – ATTACKS

3-118. An attack destroys or defeats enemy forces, seizes and secures terrain, or both. Attacks may be hasty or deliberate, depending on the time available for assessing the situation, planning, and preparing. When the commander decides to attack or the opportunity to attack occurs during combat operations, the execution of that attack must mass the effects of overwhelming combat power against selected portions of the enemy force with a tempo and intensity that cannot be matched by the enemy. The resulting combat should not be a contest between near equals. Attackers must be determined to seek decision on the ground of their choosing through the deliberate synchronization and employment of the combined arms team.

3-119. Attacks may direct the rapid execution of battle drills by forces immediately available or follow detailed plans and orders. At one extreme, the battalion discovers the general enemy situation through a movement to contact and launches an attack as a continuation of the meeting engagement to exploit a temporary advantage in relative combat power and to preempt enemy actions. At the other, the battalion moves into an attack from a reserve position or assembly area with detailed knowledge of the enemy, a task organization designed specifically for the attack, and a fully rehearsed plan. Most attacks fall somewhere on this continuum.

ORGANIZATION OF FORCES

3-120. The commander task-organizes forces within the battalion after he chooses a scheme of maneuver. The task organization allocates sufficient combat power to allow subordinate companies to accomplish their assigned tasks. The commander normally organizes the force into a security force, a main body, and a reserve, all supported by some type of sustainment. The commander should complete any changes in task organization in time to allow units to conduct rehearsals with their attached and supporting elements. The best place and time for an attacking force to task organize is when it is in an assembly area.

SECURITY FORCES

3-121. A commander can resource a dedicated security forces during an attack only if the attack will uncover one or more flanks or the rear of the attacking force as it advances. Normally, an attacking unit does not need extensive forward security forces. Most attacks are launched from positions in contact with the enemy, which reduces the usefulness of a separate forward security force. The exception occurs when the attacking unit is transitioning from the defense to an attack and had previously established a security area as part of the defense.

MAIN BODY

3-122. The commander organizes the main body to conduct the decisive operation and necessary shaping operations. The commander aims the decisive operation toward the immediate destruction of the enemy force, its will to resist, seizure of a terrain objective, or the defeat of the enemy's plan. The maneuver scheme identifies the focus of the decisive operation. All of the force's available resources operate in concert to assure the success of the decisive operation. The element designated to conduct the decisive operation can change during the course of the attack. The commander must consider an assault, breach, and support force if the commander expects to conduct a breach operation during the attack.

RESERVE

3-123. The commander uses the reserve to exploit success, defeat enemy counterattacks, or restore momentum to a stalled attack. Once committed, the reserve's actions normally become or reinforce the echelon's decisive operation. The commander makes every effort to reconstitute another reserve from platoons made available by the revised situation. Often a commander's most difficult and important decision concerns the time, place, and circumstances for committing the reserve. The reserve is not a committed force; it is not used as a follow-and-support force or a follow-and-assume force.

3-124. In the attack, the combat power allocated to the reserve depends primarily on the level of uncertainty about the enemy, especially the strength of any expected enemy counterattacks. The commander only needs to resource a small reserve to respond to unanticipated enemy reactions when detailed information about the enemy exists. When the situation is relatively clear and enemy capabilities are limited, the reserve may consist of a small fraction of the force. When the situation is vague, the reserve may initially contain the majority of the commander's combat power.

CONTROL MEASURES FOR AN ATTACK

3-125. Units conducting offensive tasks are assigned an AO within which to operate. Within the AO, the commander normally designates the following control measures whether or not the attack takes place in a contiguous or noncontiguous environment:

- AOs for subordinate units of battalion size or larger.
- Phase line as the LD, which may be the line of contact (LC).
- Time to initiate the operation.
- Objective.

3-126. A commander can use any other control measures necessary to control the attack. Short of the LD/LC, the commander may designate assembly areas and attack positions where the unit prepares for offensive tasks or waits for the establishment of the required conditions to initiate the attack. Beyond the LD/LC the commander may designate checkpoints, phase lines, PLD, assault positions, and direct and indirect fire support coordinating measures. Between the PLD and the objective a final coordination line, assault positions, support-by-fire and attack-by-fire positions, and time of assault to further control the final stage of the attack can be used.

PLANNING

3-127. The CAB directs its main effort against an objective, ideally an enemy weakness, which will cause the collapse of the enemy defense. The battalion seeks to attack the enemy's flanks, rear, or supporting formations. By doing so, the CAB retains the initiative and reduces its own vulnerabilities.

3-128. The commander seeks to identify a poorly defended avenue of approach, a small unit lacking mutual support within the enemy defense, or a weak flank that he can exploit to gain a tactical advantage. (See Figure 3-5.) When attacking a well-prepared enemy defense, the CAB commander usually tries to isolate and then destroy small vulnerable portions of the enemy defense in sequence. The commander and staff develop the plan using a reverse-planning process from actions on the objective back to the LD or assembly area. They incorporate plans for exploiting success and opportunities that develop during execution. They emphasize synchronization of mounted and dismounted movement, maneuver, fires, and support throughout the attack.

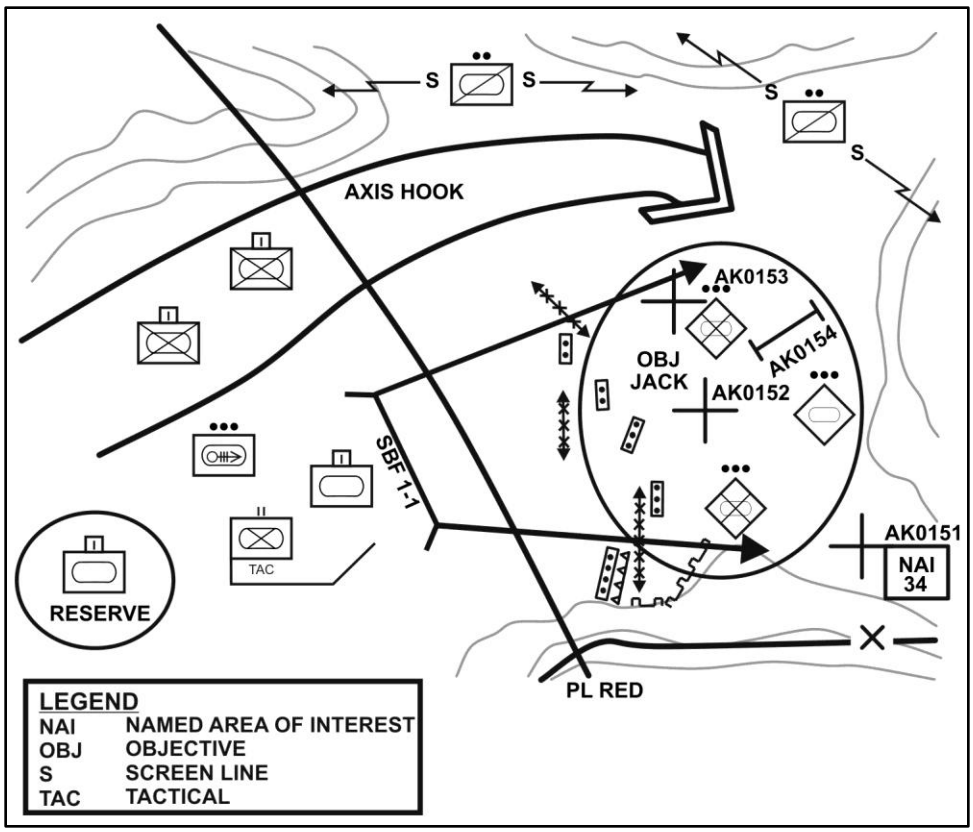


Figure 3-5. CAB attack

PREPARATION

3-129. The battalion uses available time prior to the attack to conduct extensive reconnaissance, precombat checks, inspections, and rehearsals while concealing attack preparations from the enemy. The commander and staff refine the plan based on continuously updated intelligence. Subordinates conduct parallel planning and start their preparation for the attack immediately after the battalion issues a FRAGORD. As more intelligence becomes available, the commander revises orders and distributes them via FM or FBCB2. Regardless of the time available, the commander must conduct detailed planning and supervision of subordinate preparations.

INSPECTIONS

3-130. The battalion commander supervises subordinate troop leading procedures to ensure planning and preparations are on track and consistent with his intent. The commander may inspect subordinate unit order briefs and rehearsals. He focuses his inspections on the main effort and critical events such as assaults, breaching operations, and passages of lines.

REHEARSALS

3-131. The CAB should conduct rehearsals, but the type of rehearsal and technique may vary based on time available. The primary focus of the rehearsal is actions on the objective. Each subordinate commander addresses the conduct of his mission as the rehearsal progresses. The rehearsal places special emphasis on timing of actions and the coordinated maneuver of forces. All subordinate commanders must accurately portray how long it takes to complete assigned tasks and how much space is required by their force. Direct and indirect fire plans are covered in great detail, including the massing and control of fires. The commander ensures subordinate plans are coordinated and consistent with his intent. The rehearsal also covers the following:

- Plans to execute follow-on missions or exploit success.
- Likely times and locations where a reserve is needed.

- Execution of the fire support plan, including shifting fires, employing CAS, adjusting FSCMs, and positioning observers and snipers.
- Breaching, gap crossing, and countermobility operations.
- Passages of lines.
- Contingency plans for actions against enemy counterattacks, repositioning, commitment of reserves, or use of CBRN capabilities.
- Consolidation and reorganization.
- Execution of branches or sequels assigned by brigade.
- Execution of the sustainment plan including MCP, CASEVAC, movement of combat trains, and contingency resupply.

RECONNAISSANCE

3-132. Effective and current intelligence is a prerequisite for a successful attack. Before mounting an attack, the commander needs to determine the enemy's strength and disposition. In an attack, the entire intelligence collection, analysis, and dissemination process must rapidly respond to CCIR. The BCT provides most of the information available to the CAB commander and staff through updates and crosstalk, as well as updates based on the brigade's collection plan. The CAB commander must receive an accurate picture of the enemy's defense so he can decide on a COA and act faster than the enemy can react. Often, the BCT cavalry Squadron can provide the best information to focus the CAB's attack. In addition, the CAB commander may use elements of the sniper squad for surveillance, and in order to provide real time information of the objective or other areas of interest.

3-133. When preparing for an attack, the commander and staff participate in development of the information collection plan. This is a well-resourced and coordinated reconnaissance effort that provides a detailed picture of the enemy situation prior to execution of the attack. This reconnaissance effort must include redundant information-gathering systems to ensure continuous flow of information to the CAB and to the BCT. The commander uses this intelligence to decide on a COA and make refinements to the plan. The information collection effort also provides him with continuous updates during the attack so he can adjust execution of the operation based on the enemy's reactions.

ENEMY'S CURRENT ARRAY OF FORCES

3-134. The intelligence available to the battalion comes from acontinuous stream of information that begins with information collection systems, such as JSTARS, UAS, BCT cavalry Squadron, snipers, and scout platoon to establish the intelligence links to the battalion.

3-135. The first priority is to confirm information available on the enemy's composition, disposition, capabilities, and most probable COA. The next priorities are the effects of weather and terrain, and how the enemy is likely to fight. The S-2 tries to determine what the enemy will do and what information about the enemy's action the battalion needs to confirm. The battalion information collection effort focuses on identifying indicators required for confirming the enemy's actual COA. Ideally, the commander does not make final decisions on how to execute the attack until he can identify the current array of enemy forces. Key areas of information that friendly units should obtain about a defending enemy force include:

- Composition, disposition, and capabilities forces along a flank or an area selected for penetration.
- Composition, disposition, and capabilities of security forces.
- Location, orientation, type, depth, and composition of obstacles.
- Locations of secure bypasses around obstacles.
- Composition, disposition, and capabilities of defending formations.
- Composition, disposition, capabilities, and location of reserves.
- Location of routes the enemy may use to counterattack or reinforce his defense

3-136. Reconnaissance assets observe the enemy defense from advantageous OPs to locate gaps, identify weapons systems and fighting positions, view rehearsals and positioning, and determine the enemy's security

activities and times of decreased readiness. The S-2 must discern any enemy deception efforts, such as phony obstacles, dummy emplacements, and deception positions, designed to confuse an attacker.

SUPPORT ON THE APPROACH TO THE OBJECTIVE

3-137. A rapid, secure advance to the enemy's main defense depends on ISR success in locating enemy security forces and obstacles. Reconnaissance initially focuses on the enemy's security forces forward of his main defense to locate his positions and obstacles along the CAB's planned routes of advance. Reconnaissance also locates gaps and the routes that allow them to infiltrate into the enemy's main defensive area or rear area. Reconnaissance efforts continue by locating enemy forces that could reposition and affect the battalion's approach to the enemy's main defense. Successful attacks usually have reconnaissance forces placing indirect fires on targets to the enemy's rear that isolate the enemy's frontline forces and prevent them from being reinforced.

EXECUTION

3-138. The commander positions information collection assets to maintain observation of enemy reactions to the CAB's maneuver. Reconnaissance focuses on areas the enemy likely will use to reposition forces, commit reserves, and counterattack. As the force-on-force engagement on the objective develops, reconnaissance elements report enemy reactions, repositioning, and BDA. Reconnaissance elements target and engage enemy repositioning forces, reserves, counterattacking forces, and other HPTs with indirect fires. Early identification of enemy reactions is essential for the battalion to maintain momentum and initiative during the attack.

GAIN AND MAINTAIN CONTACT

3-139. The CAB gains and maintains contact during the approach, and is ready to—

- Bypass, breach, or cross obstacles.
- React to all eight forms of contact.
- Transition to different formations based on the terrain and enemy situation.
- Employ forces to screen flanks that could become exposed or threatened during the approach.
- Avoid terrain features that are likely enemy artillery reference points, locations for CBRN strikes, or locations for situational obstacles.
- Employ indirect fire support to establish conditions for assault forces.
- Destroy or force the withdrawal of opposing enemy security forces.
- Minimize the effects of enemy deception.

3-140. The CAB must counter the effects of enemy security forces to ensure an unimpeded and concealed approach. Before the attack, reconnaissance forces seek to locate enemy security forces. Once located, the commander has the following options available:

- Destroy them immediately with indirect fires and CAS (preferred option).
- Destroy them with indirect fires and CAS during the approach to the objective.
- Conduct limited objective attacks prior to execution of the main attack.
- Employ a strong advance guard to destroy or force the withdrawal of enemy security forces during the approach to the objective.

3-141. The battalion must maintain tempo. Speed and dispersion, facilitated by close coordination and communication, are the norm when massing weapons' effects to destroy the enemy's defense. If the formation is too slow or becomes too concentrated, as it can in urban or restricted terrain, it is vulnerable to massed enemy fires. The three dimensional terrain of an urban environment will challenge the CAB's ability to maintain tempo. It is paramount to keep the vehicles constantly mobile, as they are more vulnerable when static. The CAB's BFVs and tanks are effective at penetrating defenses and gaining a foothold when mutually supported with dismounted Infantry.

DISRUPT THE ENEMY

3-142. The battalion employs fires to disrupt and weaken the enemy's position and set the conditions for success prior to closure within direct-fire range of the enemy. Initially, fires focus on the destruction of key enemy forces that can most affect the concept of operations. For example, during an attack to penetrate an enemy defense, the initial focus of fires is to destroy the enemy positions at the selected point of penetration. Fires can also—

- Destroy enemy security forces.
- Weaken or neutralize enemy reserves.
- Disrupt enemy command and control
- Emplace artillery-delivered obstacles to block enemy reserve routes to the objective.
- Deceive the enemy as to the battalion's actual intentions.
- Obscure friendly movements and deployment.
- Isolate the objective and suppress enemy positions.
- Neutralize the enemy's indirect fires with counterbattery fires.

3-143. The coordination between fires and maneuver is critical. As maneuver forces approach the enemy defense, the commander shifts fires and obscuration to suppress and obscure the enemy. Proper timing and adjustment of fires enable the maneuver force to securely close on the enemy's positions. The commander must monitor the success of fires to determine when adequate conditions exist for commitment of the force. Reconnaissance elements provide BDA to the commander to assist him in making this decision. The commander may need to adjust the speed of the CAB's approach to the objective based on reports from the scout platoon.

FIX THE ENEMY

3-144. The CAB can fix the bulk of the enemy forces into given positions or pursue a COA that limits the options available to the enemy. In limiting the options available to the enemy, the objective is to reduce the uncertainty during the battle. The primary goal is to isolate the unit targeted for destruction by preventing the enemy from laterally repositioning or reinforcing it.

3-145. Usually, a company team fixes the enemy force by attacking an objective that isolates a portion of the enemy's defense. In open terrain, the most common task for the shaping force is to fix the enemy with direct and indirect fire. In more complex terrain, the supporting force may need to seize terrain or destroy key enemy forces in limited objective attacks. The use of fires and CAS is vital when attacking enemy forces and reserves in depth because fires and CAS prevent the enemy's commitment against the battalion.

MANEUVER

3-146. The commander maneuvers combat forces and employs fires, situational obstacles, and obscurants to create favorable conditions for decisive maneuver against the enemy. The commander commits maneuver forces and fires to isolate, then rupture, a small vulnerable portion of the enemy's defense to gain a flank or create a penetration. The CAB achieves final destruction of the enemy force through the attack of assaulting forces. Timely reporting, crosstalk, accurate assessments, and sharing of information by subordinate commanders are paramount.

3-147. The attacker must be agile enough to concentrate his forces and mass his combat power by maneuver before the enemy can reorient his defense. Usually, the destruction of a defending enemy force dictates an assault of the objective. The shaping force shifts direct and indirect fires, and repositions as required to support the maneuver of assaulting forces. As the assaulting force commits, the battalion commander and staff ensure that current information is available about the—

- Locations and types of enemy contact on the objective.
- Locations of friendly reconnaissance forces.
- Locations of lanes and obstacles, including lane markings.
- Recognition signals and guides.
- Specific routes to use for the approach.

- Locations and orientations of fires from friendly forces.
- Additions or modifications of graphic control measures.

3-148. Previously dispersed assaulting forces quickly assemble into combat formations, and rapidly maneuvers to destroy the enemy forces and clear assigned objectives. The assaulting force moves along covered and concealed routes to an exposed enemy flank, created penetration, or other position of advantage. The use of obscurants helps to conceal the movement of assaulting forces. The assault includes destruction of defending forces and clearance of trenches and fortifications; and can involve a combination of mounted and dismounted movement. The CAB commander's main focus is maintaining momentum and security of the assaulting force. The information collection effort continues to report enemy repositioning, BDA, and enemy counteractions to the assault. The battalion limits enemy repositioning and massing against assaulting forces through intense supporting fires and CAS, a rapid assault, and employment of smoke.

FOLLOW THROUGH

3-149. After seizing the objective, the commander has two alternatives: exploit success and continue the attack or terminate the offense. The CAB maintains contact and attempts to exploit its success. The higher commander makes the determination whether to initiate a general, as opposed to local, exploitation or pursuit or terminate offensive actions. The CAB commander must understand and report the status and limits of his sustainment support capabilities for follow on actions. Executing the follow-on plans should not over-extend the sustainment capabilities of the BSB and FSCs, to do so creates risks to the success of the follow-on action.

SPECIAL PURPOSE ATTACKS

3-150. The CAB may also be tasked to conduct special purpose attacks such as an ambush, counterattack, demonstration, feint, raid, spoiling attack. The commander's intent and mission variables of METT-TC will determine the specific attack form. Special purpose attacks share many of the planning, preparation, and execution considerations of the attack.

AMBUSH

3-151. The *ambush* is an attack by fire or other destructive means from concealed positions on a moving or temporarily halted enemy. (FM 3-90-1) An ambush capitalizes on the element of surprise. Ambushes are categorized as near, or far ambushes, based on the proximity of the friendly force to the enemy and hasty or deliberate. A hasty ambush is an immediate reaction to an unexpected opportunity conducted using SOPs and battle drill. A deliberate ambush is planned as a specific action against a specific target.

3-152. The CAB will most likely execute company level and below ambushes as offensive tasks to a larger operation. Because the ambush relies on the element of surprise, conducting a deliberate ambush in a populated urban area with multiple actors is a challenge for large Armored vehicle formations. However, tank and BFV units well trained in battle drills can achieve the element of surprise through the application of audacity, concentration, and tempo to conduct hasty ambushes at opportunistic times. The precision, lethality and range of tanks and BFVs are well suited for far ambushes in open terrain that afford some means of concealment.

3-153. The three types of ambush are point, area, and anti-armor. In a point ambush, a unit deploys to attack a single kill zone. In an area ambush, a unit deploys into two or more related point ambushes. A unit smaller than a platoon does not normally conduct an area ambush. Antiarmor ambushes focus on moving or temporarily halted enemy armored vehicles. The ambush by its very nature is a violent and decisive action and requires Soldiers to harness the aggression that comes with its execution in a professional manner according to the laws of war and rules of engagement.

Organization of Ambush Forces

3-154. A typical ambush is organized into three elements: assault, support, and security. The assault element fires into the kill zone to destroy the enemy force. The assault force, normally BFVs and Infantry dismounts, attacks into and clears the kill zone and may be assigned additional tasks, to include searching for items of intelligence value, capturing prisoners, and completing the destruction of enemy equipment to preclude its immediate reuse. The support element consisting of BFVs and tanks, support the assault element by firing into

and around the kill zone, and it provides the ambush's primary killing power. The security element isolates the kill zone by blocking enemy avenues of approach into the ambush site after the ambush has commenced. They provide early warning of the arrival of any enemy relief force and security for ambush elements.

Planning and Preparing an Ambush

3-155. A key to the planning and preparation of any ambush is site selection. The site should provide concealment and element locations, insertion and exit routes for assault forces, and natural, manmade, or military obstacles to integrate with direct and indirect fires to trap enemy elements in the kill zone. (Refer to FM 3-90-1 for more information on ambush planning, preparation considerations, and the types of formations and their use in point and area ambushes.)

Executing an Ambush

3-156. Initiating the ambush when the bulk of the enemy is in the kill zone, coupled with precise and discipline fires are key elements to a successful ambush. After the conduct of an ambush the ambush commander, or representative debriefs the force on enemy tactics, procedures and patterns utilized against the ambush, in order for future units to account for these when planning for ambush operations.

COUNTERATTACKS

3-157. A counterattack is an attack by part or all of a defending force against an enemy attacking force, for such specific purposes as regaining ground lost, or cutting off or destroying enemy advance units, and with the general objective of denying to the enemy the attainment of the enemy's purpose in attacking. In sustained defensive operations, it is undertaken to restore the battle position and is directed at limited objectives. (ADRP 1-02) Counterattacks are conducted to regain key terrain and ultimately regain the initiative.

3-158. A counterattacking force maneuvers to isolate and destroy a designated enemy force. It can attack-by-fire into an EA to defeat or destroy an enemy force, restore the original position, or block an enemy penetration. Once launched, the counterattack usually becomes a decisive operation for the commander conducting the counterattack. The integration of reconnaissance forces, indirect fires, and other enablers is critical for the success of a counterattack. The CAB, with its communication systems, responsiveness, firepower, maneuverability, and protection, makes it a very powerful counterattack force. The CAB can be used as a subordinate element within a larger counterattack force, as the counterattack force, or use one or more of its subordinate elements as a counterattack force within the CAB's AO.

3-159. The commander plans and conducts a counterattack to attack the enemy when and where he is most vulnerable. Usually, the commander attempts to retain his reserve or striking force to conduct a decisive counterattack once the enemy commits his main force to the attack. The commander assigns objectives to counterattacking forces when he intends for them to assault the enemy. He usually assigns attack-by-fire positions when he intends to counterattack using primarily direct and indirect fires. Assuring the mobility of the CAB counterattack elements is critical to the success of the defense. Engineer assets generally are task-organized to support the striking force or the reserve.

3-160. The two levels of counterattacks are major and local counterattacks. In both cases, waiting for the enemy to act first may reveal the enemy's main effort and create an assailable flank to exploit. A defending unit conducts a major counterattack to seize the initiative from the enemy and defeat him through offensive action after an enemy launches his attack. A commander also conducts major counterattacks to defeat or block an enemy penetration that endangers the integrity of the entire defense, or to attrite the enemy by the defeat or destruction of an isolated portion of the attacking enemy. Local counterattacks are designed to restore the defense by immediately committing all available resources to prevent the enemy from consolidating his gains. A commander however, has to balance the advantages of a quickly developed local counterattack with the danger of piecemeal commitment of his forces.

Organization of Counterattack Forces

3-161. The CAB commander of a major counterattack force typically organizes units into security, main body, and reserve forces. He uses those defending forces already in contact with the enemy to fix or contain those same enemy forces. The commander may use a force committed to the counterattack, such as the striking force

in a mobile defense, his reserve, another echelon's reserve, or designate any other force he deems appropriate to be the counterattack force. Any changes in task organization should be completed in time to allow units to conduct rehearsals with their attached or supported unit.

3-162. A commander conducts a local counterattack with whatever forces are immediately available to retake positions that have been lost to enemy action or to exploit a target of opportunity. The forces often consist of the reserves of subordinates and defending forces that survive after completing their withdrawal from lost positions. If possible, engineer assets should be included to assure mobility. While it is unlikely that the commander changes the task organization of the forces conducting a local counterattack, he organizes the force into a security force and a main body. He may be able to designate an element to conduct reconnaissance.

3-163. If the CAB's defensive scheme depends on a counterattack as the defeat mechanism, the counterattack force is considered to be committed from the beginning of the defensive operation. In this case, the commander should designate another force as his reserve.

Planning a Counterattack

3-164. The commander plans the counterattack to strike the enemy when the enemy force is vulnerable. As the enemy force advances, the defense may create gaps between enemy units, exposing the flanks and rear of elements of the attacking force. Immediately after an enemy force occupies a defended position, it is often disorganized and ill prepared to meet a sudden local counterattack. Because the opportunities for effective counterattacks are usually brief, the commander must assess the situation rapidly, and the force must execute the counterattack swiftly. The commander assigns objectives or attack-by-fire positions to counterattacking forces, depending on whether or not he intends for the counterattacking force to close with and assault the enemy.

3-165. Major counterattack plans usually are developed as a branch or sequel to the main defensive plan. A major counterattack may achieve surprise when it strikes the enemy from an unanticipated direction. For that reason the force directed to conduct a major counterattack, such as the striking force in a mobile defense, should be involved in developing those plans as well as any plans to exploit potential success. Local counterattacks may or may not be the result of previous deliberate planning.

Preparing a Counterattack

3-166. Surprise, mobility, coordinated fires, and control are the keys to a successful counterattack. Surprise enables the counterattacking force to seize control of the situation. If total surprise is not possible, it must be as close to total as possible so that the targeted enemy force does not expect the attack until it is too late to react effectively. Thorough planning and preparation help achieve surprise. The commander adjusts the positioning of his information collection assets and the tasks he gives those assets so that he can determine the location and targets for his counterattack.

3-167. The commander conducts a leader's reconnaissance with key personnel to confirm or modify his counterattack plan. If necessary, the commander modifies the plan and disseminates those changes to subordinate leaders and other affected organizations. Each element of the counterattack force reconnoiters its planned axis of advance and routes it will take if possible. The commander maintains close control during movement to and occupation of hide positions and this reconnaissance process so the enemy does not detect the counterattack force prior to initiating the counterattack. Leaders enforce camouflage, noise, and light discipline.

3-168. The commander adjusts the planned positions of his weapons systems to obtain the maximum effectiveness against targets in the planned EA. He coordinates all fires, including those of supporting artillery and mortars. He wants his fires to isolate the targeted enemy force in the planned EA while preventing the target's escape or reinforcement. These fires must inflict maximum damage quickly before the enemy can respond to the counterattack.

Executing a Counterattack

3-169. Whenever possible, the commander retains his counterattack for his decisive operation, which is conducted after the enemy reveals his main effort by committing the majority of his combat power. If the

commander orders his reserve to conduct a planned counterattack, the reserve becomes a committed force and the commander should take measures to designate or reconstitute a new reserve.

3-170. The commander conducts the counterattack in the same manner in which he conducts any other attack. He shifts support and priorities of fire, and designates targets to be engaged. The counterattack force performs the same actions as an attacking force:

- Gain and maintain enemy contact.
- Disrupt the enemy.
- Fix the enemy.
- Maneuver.
- Following through.

3-171. Subordinate commanders initiate local counterattacks with the forces on hand when it fits within the higher commander's intent. A local counterattack should be swift and violent. It should exploit any disorganization on the part of the enemy, such as the confusion that temporarily exists in an attacking force after it seizes a defended position. A rapidly mounted local counterattack can yield better results than a more deliberate counterattack executed by a higher echelon. This is because of the speed at which the mounted local counterattack can be launched.

3-172. In the face of a strong enemy penetration, a commander can conduct local counterattacks to retain or seize positions on the shoulders of the enemy's penetration and potentially reinforce those positions with hasty obstacles. This prevents the enemy from widening the penetration while forces from other defending units engage the penetrating enemy forces. In addition, holding the shoulders can prevent the sacrifice of positional depth because the limited gap in the defensive position prevents an attacking enemy from fully exploiting his success.

DEMONSTRATION

3-173. A *demonstration* is a show of force in an area where a decision is not sought that is made to deceive an adversary. It is similar to a feint but no actual contact with the adversary is intended. (JP 3-13.4) A demonstration can be achieved by repositioning, or moving forces in order to get enemy forces to reorient their attention and weapon systems. (Refer to FM 3-90-1 for more information.)

FEINT

3-174. A *feint* in military deception is an offensive action involving contact with the adversary conducted for the purpose of deceiving the adversary as to the location and time of the actual main offensive action. (JP 3-13.4) Feints must be of sufficient strength and composition to cause the desired enemy reaction. Feints must appear real; therefore, some contact with the enemy is necessary. The feint is most effective under the following conditions:

- When it reinforces the enemy's expectations.
- When it appears to be a definite threat to the enemy.
- When the enemy has a large reserve that it has consistently committed early.
- When there are several feasible COAs open to the attacker.

3-175. Planning for a feint mission follows the same sequence as any other attack. Special planning considerations include the following:

- Ensure the battalion resources the feint to make it appear as the main effort or as a significant threat to the enemy.
- Establish clear guidance regarding force preservation.
- Ensure adequate means of detecting the desired enemy reaction.
- Designate clear disengagement criteria for the feinting force.
- Assign attainable objectives.
- Issue clear follow-on missions to the feinting force

RAID

3-176. A *raid* is an operation to temporarily seize an area in order to secure information, confuse an adversary, capture personnel or equipment, or to destroy a capability. It ends with a planned withdrawal upon completion of the assigned mission. (JP 3-0) A raid ends with a planned withdrawal. Raids are usually small-scale attacks requiring detailed intelligence, preparation, and planning. Typical raid missions accomplish the following:

- Capture prisoners, installations, or enemy materiel.
- Destroy enemy materiel or installations.
- Obtain specific information on an enemy unit such as its location, disposition, strength, or operating scheme.
- Deceive or harass enemy forces.
- Liberate captured friendly personnel.
- Site exploitation (SE).

3-177. The raiding force may vary in size from an Infantry platoon to the entire CAB. It may operate within or outside the battalion's supporting range. The raiding force moves to its objective (either mounted or dismounted) for a quick, violent attack. Once it completes the raid mission, the raiding force quickly withdraws along a different route. The following are specific planning considerations for a raid mission:

- Conduct detailed reconnaissance and maintain constant surveillance of the raid objective to ensure the enemy situation remains unchanged and within the capability of the raiding force. The BCT must provide information collection support to the CAB in order to plan and conduct a raid successfully.
- Position fire support systems to provide immediate responsive fires during the approach, actions on the objective, and withdrawal. Interdiction fires, deception fires, counterstrikes, and situational obstacles reduce the enemy's ability to react to the raid.
- Ensure proper security because the raiding force is vulnerable to attack from all directions.
- Establish clear abort criteria for the raid. These may include loss of personnel, equipment, or support assets as well as changes in the enemy situation.
- Develop contingency plans for contact prior to and after actions on the objective.
- Plan CASEVAC and raiding force extraction throughout the entire depth of the operation.
- Plan rally points for units to assemble to prepare for the attack or to assemble after the mission is complete and the force is ready to withdraw.
- Consider logistical factors such as the types and numbers of vehicles and weapons the raiding party will have, movement distance, length of time the raiding party will operate in enemy territory, and expected enemy resistance. Aircraft or linkup provides CASEVAC or resupply of the raiding force, if required, during the withdrawal.
- Conduct withdrawal over a different route than that used to approach the objective.

3-178. The CAB may participate in an artillery raid as part of a division operation. In such an operation, the CAB supports the positioning of artillery. If necessary, the battalion destroys or defeats enemy forces to allow the artillery unit to position itself to strike the necessary enemy targets.

SPOILING ATTACK

3-179. A *spoiling attack* is an attack launched from the defense to disrupt the enemy's attack preparations. Spoiling attacks focus on the enemy's critical systems and forces that have the greatest impact on his ability to mount an attack. Lucrative targets include command and control systems, intelligence assets, fire support , and logistics. Units can conduct spoiling attacks as often as needed to deny adequate attack preparation to the enemy. The CAB usually conducts a spoiling attack as part of the higher headquarters operation. Spoiling attacks are planned and executed in the same manner as an attack.

SECTION IV – DIRECT FIRE CONTROL IN OFFENSE

3-180. The ultimate goal of direct fire control is to mass fires, but the concept of massing direct fires is widely misunderstood. Frequently, it is mistaken for volume. Volume of fires does not equal massing of fires. Massing

of fires is defined by the terminal effect on the enemy, not the number of systems firing or the number of rounds fired

Principles of Direct Fire Control

3-181. Effective fire control requires a unit to rapidly acquire the enemy and mass the effects of fires to achieve decisive results in the close fight. In addition, there are several principles of direct fire that the CAB commander and his subordinate leaders must know how to apply during tactical operations. The purpose of these principles of direct fire is not to restrict the actions of subordinates. Applied correctly, they help the CAB to accomplish its primary goal in any direct fire engagement: to acquire first and shoot first. They give subordinates the freedom to act quickly upon acquisition of the enemy. (Refer to ATP 3-90.1 for more information.) This discussion focuses on the principles listed below:

- Mass the effects of fire.
- Destroy the greatest threat first.
- Avoid target overkill.
- Employ the best weapon for the target.
- Minimize friendly exposure.
- Prevent fratricide.
- Plan for extreme limited visibility conditions.
- Develop contingencies for diminished capabilities.

DIRECT FIRE PLANNING

3-182. Leaders plan direct fires in order to be able to distribute and control their fire. Determining where and how the company team can mass fires is an essential step in this process. Based on where and how they want to focus and distribute fires, leaders can establish the weapons ready postures for their elements as well as triggers for initiating fires. During mission preparation, leaders plan and conduct rehearsals of direct fires (and of the fire control process) based on the estimate of the situation.

DIRECT FIRE STANDARD OPERATING PROCEDURE

3-183. A well-rehearsed direct fire TACSOP enhances quick, predictable actions by all members of the CAB. The commander bases the various elements of the TACSOP on the capabilities of his force and on anticipated conditions and situations. TACSOP elements should include means for—

- Focusing fires.
- Distributing fire effects.
- Orienting forces.
- Preventing fratricide.

FIRE CONTROL MEASURES

3-184. Fire control measures are the means by which the commander or subordinate leaders control fires. Application of these concepts, procedures, and techniques assists the unit in acquiring the enemy, focusing fires on him, distributing the effects of the fires, and preventing fratricide. At the same time, no single measure is sufficient to control fires effectively. Fire control measures are effective only if the entire unit has a common understanding of what they mean and how to employ them.

3-185. The commander can use terrain-based fire control measures to focus and control fires on a particular point, line, or area, or he uses threat-based fire control measures to focus and control fires by directing the unit to engage a specific enemy element rather than on a point or area. Fire control measures are listed in Table 3-1.

Table 3-1. Common offensive fire control measures

Terrain-Based Fire Control Measures	Threat-Based Fire Control Measures
Target reference point (TRP)	**Rules of engagement (ROE)**
Sector of fire	**Weapons ready posture**
Direction of fire	**Weapons safety posture**
Terrain-based quadrant	**Weapons control status**
Friendly-based quadrant	**Engagement priorities**
Restrictive fire line (RFL)	**Fire patterns**
Maximum engagement line (MEL)	Engagement techniques
Engagement area (EA)	Triggers
Final protective line (FPL)	Target array
Note: Likely offensive fire control measures are in bold print; other control measures are less likely in the offense.	

SECTION V – TRANSITIONS

3-186. The CAB spends minimum time after concluding an engagement or actions on the objective to consolidate and reorganize before continuing the attack. If the CAB must consolidate and reorganize, the commander decides the best time and location; this facilitates future operations and provides force protection. The CAB must maintain local security when performing consolidation and reorganization activities.

CONSOLIDATION

3-187. *Consolidation* of position is organizing and strengthening a newly captured position so that it can be used against the enemy. (FM 3-90-1) The CAB may need to reorganize, avoid culmination, prepare for an enemy counterattack, or allow time for movement of adjacent units. The CAB commander makes consolidation plans before every mission, updates them during the attack, and passes them to units as the attack is completed. Consolidation actions include:

- Establishing contact (electronic, physical, or both) with adjacent friendly units.
- Reestablishing communications (if required).
- Eliminating pockets of enemy resistance.
- Establishing security consistent with the threat.
- Preparing defensive positions.
- Clearing obstacles or improving lanes to support friendly movement and reorganization activities.
- Planning and preparing for future operations.
- Conducting site exploitation and processing any detainees.
- Maintaining contact with the enemy and conducting reconnaissance.
- Cross-leveling ammunition and other supplies and conducting emergency resupply.

3-188. The CAB maintains contact with the enemy by redirecting the scout platoon, directing small-unit patrols, pulling the latest intelligence from the BCT S-2, and by conducting limited objective attacks.

REORGANIZATION

3-189. Reorganization planning begins before and continues during the attack as losses occur. Reorganization includes all measures taken by the commander to maintain unit combat effectiveness or return it to a specified level of combat capability. Companies must feed reports to the battalion as losses occur so movement of needed resupply or replacements can begin promptly. If extensive reorganization is required, the CAB conducts it during consolidation. (Refer to FM 3-90-1 for more information.) Reorganization tasks include the following:

- Reestablishing the chain of command, key staff positions, and command post facilities.
- Treating and evacuating casualties.
- Recovering and repairing damaged equipment as necessary.
- Reestablishing digital connectivity if required.

- Conducting resupply and refueling operations.
- Repositioning mission command facilities, communications assets, and logistics for future operations.
- Reorganizing company teams and platoons if required.

CONTINUING OPERATIONS

3-190. For all attacks, the CAB should plan to exploit success. However, at the conclusion of an engagement, the commander may be forced to defend. For short defensive operations, units make use of the existing terrain to enhance their survivability. If a longer defense is envisioned, engineer assets immediately should refocus their efforts on providing survivability support (fighting positions and similar activities). Engineer assets should do this even as they sustain mobility and integrate countermobility into the planned defense. The CAB commander considers the higher commander's concept of operations, friendly capabilities, and the enemy situation when making the decision to defend or continue offensive tasks.

Chapter 4

Defense

Defensive tasks defeat an enemy attack, gain time, economize forces, and develop conditions favorable for operations focused on offensive and stability tasks. Defensive tasks alone normally cannot achieve a decision. Their purpose is to create conditions for a counteroffensive that allows Army forces to regain the initiative. Defensive tasks are conducted to retain decisive terrain or deny a vital area to the enemy, attrite or fix the enemy as a prelude to offensive tasks, surprise action by the enemy, or increase the enemy's vulnerability by forcing the enemy commander to concentrate subordinate forces. As part of the BCT, the CAB can defend, conduct retrograde operations, counterattack, or perform security operations. Often, a defensive engagement requires the CAB to execute several of these tasks over its course. Even while the BCT conducts a defense, the CAB exploits opportunities to conduct offensive tasks within its AOs to deprive the enemy of the initiative and create the conditions to assume the offensive

SECTION I – BASICS OF DEFENSE

4-1. The main purpose of the defense is to force or deceive the enemy into attacking under unfavorable circumstances, defeat or destroy his attack, and regain the initiative for the offense. The defending commander attempts to determine the location of the fight. He prepares the terrain and conditions to his advantage while simultaneously denying the enemy adequate intelligence. Defense is a temporary measure that forces use to identify or exploit enemy weaknesses. Use of the defense provides the opportunity to transition to the offense. In general, the CAB defends to—

- Retain decisive terrain or denying a vital area to the enemy.
- Attrite or fix the enemy as a prelude to offensive actions.
- Surprise action by the enemy.
- Increase the enemy's vulnerability by forcing the enemy commander to concentrate subordinate force.

CHARACTERISTICS OF DEFENSE

4-2. Because of its advantages in information, lethality, and mobility, the CAB can defend in contiguous as well as noncontiguous frameworks. The information collection capabilities provided by the BCT, as well as those within the CAB structure, enable the CAB to better locate and identify the enemy's decisive and shaping efforts. Successful defenses share the following characteristic: disruption, flexibility, maneuver, massing effects, operations in depth, preparation, and security. (Refer to ADRP 3-90 for a discussion of these characteristics.)

SECTION II - DEFENSIVE TASKS

4-3. The three defensive tasks are, area defense, mobile defense, and retrograde. Each of these contains elements of the others, and usually contains both static and dynamic aspects. CABs serve as the primary maneuver elements, or terrain controlling units, for the ABCT in all types of defensive operations. They can defend AOs or positions, or they can serve as security forces or reserves as part of the ABCT coordinated defense.

Note. Division and smaller units generally conduct an area defense or a delay as part of the fixing force as the commander shapes the enemy's penetration. They might attack as part of the striking force. Alternatively, they can constitute a portion of the reserve.

AREA DEFENSE

4-4. The *area defense* is a defensive task that concentrates on denying enemy forces access to designated terrain for a specific time rather than destroying the enemy outright. (ADRP 3-90) Outright destruction of the enemy may not be a criterion for success. The focus is on retaining terrain where the bulk of the defending force positions itself in mutually supporting positions and controlling the terrain between positions. The defeat mechanism is fires into EAs, which reserve units can supplement. The commander uses his reserve force to reinforce fires, add depth, block penetrations, restore positions, or counterattack to destroy enemy forces and seize the initiative. Units conduct area defenses when—

- The mission requires holding certain terrain for a specific period of time.
- There is enough time to organize the position.
- The CAB has less mobility than the enemy does.
- The terrain limits counterattacks to a few probable employment options.
- The terrain affords natural lines of resistance, and limits the enemy to a few well-defined avenues of approach, thereby restricting the enemy's maneuver.

Types of Area Defense

4-5. The two types of area defense are defense in depth and forward defense. While the CAB commander usually selects the type of area defense to use, the higher commander often defines the general defensive scheme for the CAB.

4-6. Based on the mission variables, the defense can consist of either strong points, battle positions, or a combination. Strong points that are located on, or covering decisive terrain, are extremely effective in the defense. The CAB commander assigns the company teams their battle positions or AOs. Companies might be tasked to detach a platoon to act as the CAB reserve.

Defense in Depth

4-7. A defense in depth is normally the commander‘s preferred option. (See Figure 4-1.) Forces defending in depth absorb the momentum of the enemy‘s attack by forcing the enemy to attack repeatedly through mutually supporting positions in depth. Depth gives the commander's fire support assets time to generate devastating effects and affords the defending commander multiple opportunities to concentrate the effects of overwhelming combat power against the attacking enemy. This provides more reaction time for the defending force to appropriately respond to the attack. The commander continues to gather additional information about the attacking enemy‘s intentions and capabilities between the time combat starts and the time the enemy commits to a COA. This reduces the risk of the enemy force quickly penetrating the main line of defense along an unexpected direction.

4-8. While defending in depth, the CAB plan and prepare primary, alternate, supplementary, and subsequent fighting positions. As the attacking enemy force attempts to create a penetration, the CAB's companies hold and or shift from one position to the next coordinating the combined effects of direct and indirect fire keeping continuous pressure on the advancing enemy. The mobility, firepower, and protection of the tanks and fighting vehicles in the company teams enable the option of using a more dynamic rather than purely static defense. Commanders continuously look for opportunity to conduct local counterattacks to destroy an enemy and seize the initiative.

4-9. The commander usually decides to conduct a defense in depth when—

- The mission is not restrictive and allows the commander to fight throughout the depth of the battlefield.
- The terrain does not favor a defense well forward, and there is better defensible terrain deeper within the AO.
- The AO is deep compared to its width, and there is significant depth available.

- The cover and concealment on or near the FEBA is limited.
- The enemy has several times the combat power of the defender.

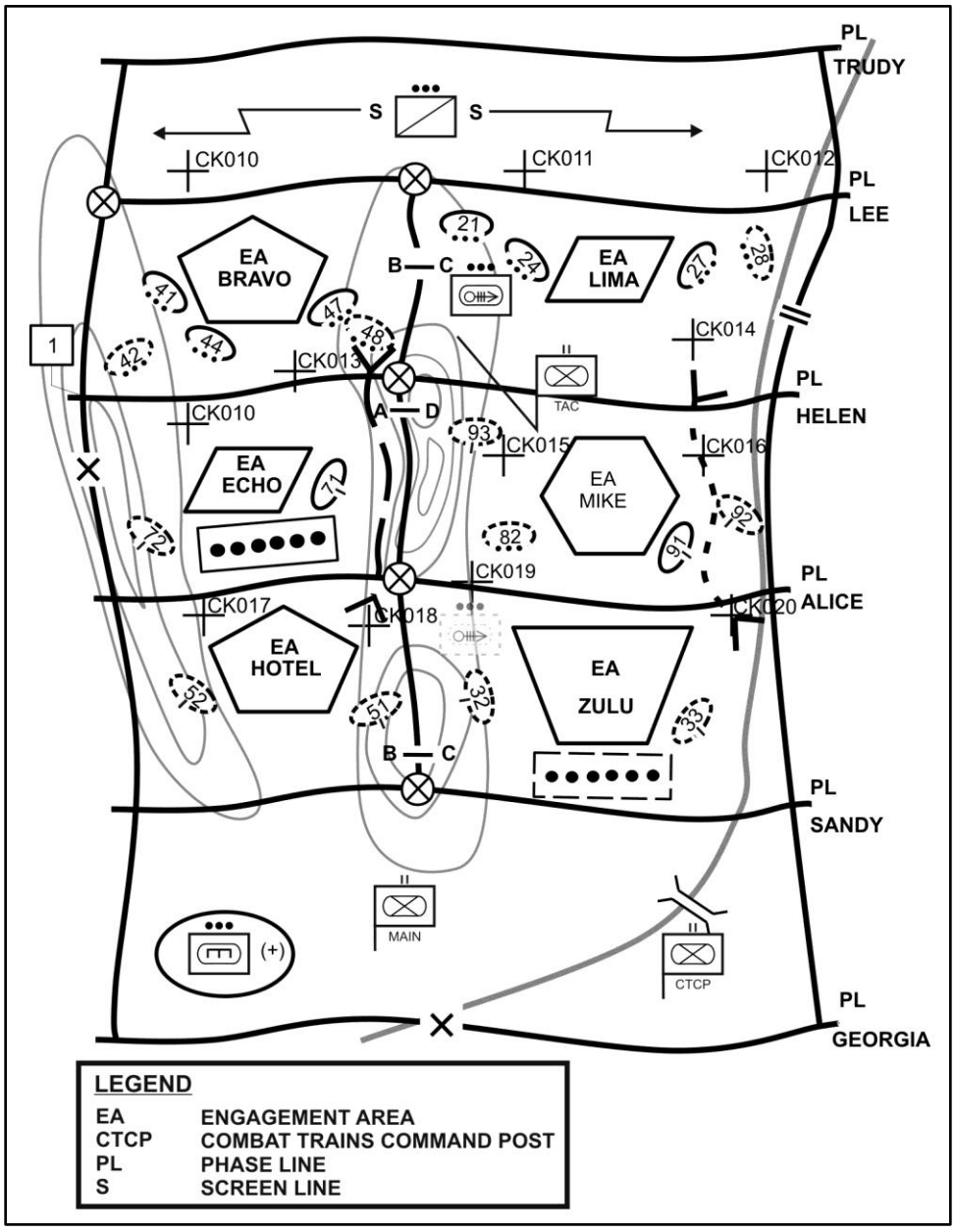


Figure 4-1. Defense in depth

Forward Defense

4-10. The intent of the forward defense is to prevent enemy penetration of the defense. (See Figure 4-2.) Due to its lack of depth, a forward defense is the least preferred. The CAB deploys the majority of its combat power into forward positions near the FEBA. The commander fights to retain its forward position and may conduct counterattacks against enemy penetrations or destroy enemy forces in forward EAs. Often, counterattacks are planned forward of the FEBA to defeat the enemy.

4-11. In general, the commander uses a forward defense when a higher commander directs him to retain forward terrain for political, military, economic, and other reasons. Alternatively, a commander may choose to

conduct a forward defense when the terrain in that part of the AO—including natural obstacles—favors the defending force because—

- The best BPs are located along the FEBA.
- Strong natural obstacles are located near the FEBA.
- Natural EAs occur near the FEBA.
- Cover and concealment in the rear portion of the AO are limited.

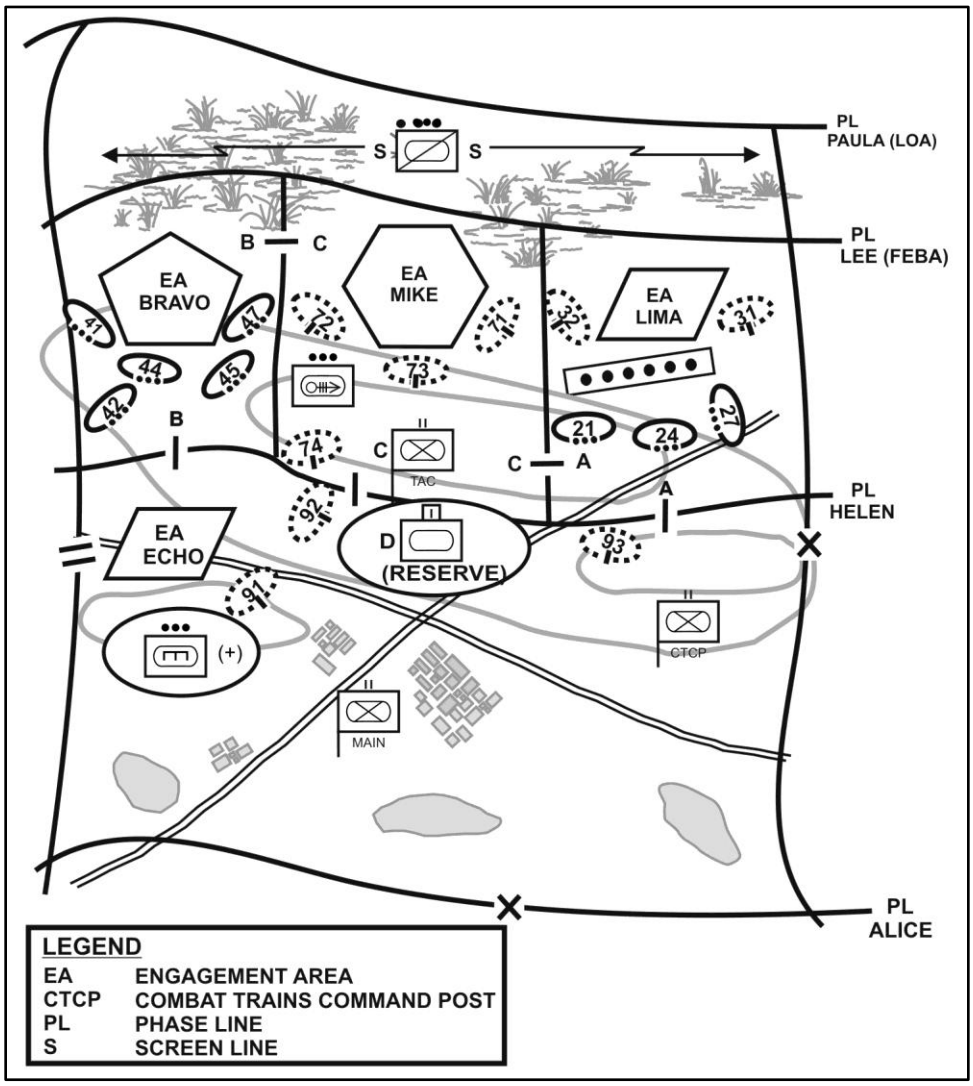


Figure 4-2. CAB in a forward defense

ORGANIZATION OF FORCES

4-12. Forces organize around a framework of a security area, a MBA and a support area. For an area defense, the CAB commander typically organizes his forces for reconnaissance and security, MBA, reserve, and sustainment missions.

SECURITY

4-13. The commander balances the need to create a strong security force to shape the battle with the resulting diversion of combat power from the main body's decisive operation. The commander can allocate security forces to provide early warning and protect those forces, systems, and locations necessary to conduct the decisive operation from unexpected enemy contact.

4-14. The CAB can assign a company team a security mission within the CAB's security area is primarily tasked with the following:

- Deceive the enemy as to friendly locations, strengths and weaknesses.
- Inhibit or destroy enemy reconnaissance forces.
- Provide early warning and disrupt enemy attacks early and continuously.
- Protect the main body of the CAB in order to preserve combat power for the main defense.

MAIN BATTLE AREA

4-15. Commander position their subordinate forces in mutually supporting positions in depth to absorb enemy penetrations or canalize them into prepared engagement areas as directed by the defensive plan in order to defeat the enemy's attack by concentrating the effects of overwhelming combat power. The MBA includes the area where the defending force creates an opportunity to deliver a decisive counterattack to defeat or destroy the enemy.

4-16. The commander builds the decisive operation around identified decisive points, such as key terrain or high-payoff targets. The commander normally positions the main body within the MBA where the commander wants to conduct the decisive operation. The majority of the main body deploys into prepared positions within the MBA.

RESERVE

4-17. The reserve typically locates in an assembly area or a concealed location until committed to the fight. The CAB commander determines the size and task organization of the reserve based on his METT-TC analysis. Typically the reserve will have few if any other mission tasks during preparation and execution of the defense other than rehearsing to respond to possible contingencies and the movement routes and techniques to move anywhere in the units AO once committed.

4-18. The reserve is not a committed force. In certain situations, it may become necessary to commit the reserve to restore the integrity of the defense by blocking an enemy penetration or reinforcing fires into an EA.

SUSTAINMENT

4-19. The sustainment mission in an area defense requires a careful balance between establishing forward supply stocks of petroleum, oils, and lubricants (POL); barrier material; and ammunition in adequate amounts to support defending units and having so many supplies located in forward locations that they cannot be rapidly moved in conformance with enemy advances. Any suitable POL, barrier material, construction equipment, and laborers that can be lawfully obtained from the civil infrastructure reduce the defending unit's transportation requirements. Likewise, maintenance and Class VIII with their associated repair parts and medical supplies must be forward deployed.

PLANNING AREA DEFENSE

4-20. The commander must consider all the factors of METT-TC to determine how to concentrate his efforts and economize forces best. Detailed analysis of terrain may be the most important process that the commander and his staff complete. A successful defense relies on a complete understanding of terrain. This understanding enables the commander to determine likely enemy courses of action and the optimal positioning of the CAB assets to counter them. The commander's keys to a successful area defense include:

- Capability to concentrate effects.
- Depth of the defensive area.
- Security.
- Ability to take full advantage of the terrain.
- Verification of the status of obstacles and routes.
- Flexibility of defensive operations.
- Timely resumption of offensive action.

LEADERS' RECONNAISSANCE

4-21. When feasible, the commander and subordinate leaders conduct a reconnaissance of the AO to develop most of the plan based on their view of the actual terrain. The commander and staff develop a plan for the leaders' reconnaissance that includes provisions for security, leaders and key staff members required to participate, designation of a recorder, areas to reconnoiter, and time allocated for the reconnaissance. When available, the commander might use aviation assets to conduct the leaders' reconnaissance.

MISSION COMMAND

4-22. Defending an AO is a typical mission for a battalion. As in the offense, commanders and staffs integrate MDMP and TLP activities within the headquarters and across the force as they exercise mission command. The defense allows the commander to distribute forces to suit the terrain and plan engagement areas that integrate direct and indirect fires. The commander must ensure that subordinate unit defensive plans are compatible and that control measures, such as contact points and phase lines, are sufficient for flank coordination to ensure that the plan for their part of the defense is properly coordinated, not only within their units, but also with flanking and supporting units. (Refer to FM 3-90-1 for more information.)

4-23. The commander may change task organization to respond to the existing or projected situation, such as forming a detachment left in contact prior to conducting a withdraw. When possible the commander ensures that changes in task organization take place between units that have previously trained or operated together to take advantage of established interpersonal relationships.

4-24. A critical step is the expression of the commander's vision of anticipated enemy actions integrated with the staff's IPB. The CAB IPB and the ABCT IPB should not differ significantly and provide the CAB commander and staff a clear understanding of how the ABCT commander envisions the enemy will fight, and the enemy's plan for the operation. From that, the CAB commander and staff refine the IPB to focus on the details of the operation in the CAB AO. The ABCT commander usually defines where and how the ABCT will defeat or destroy the enemy. The CAB commander defines how he envisions the CAB will execute its portion of the brigade fight.

MOVEMENT AND MANEUVER

4-25. In noncontiguous operations, the CAB often must defend either on a broad front, or in an AO so large that it would be unrealistic to employ units in mutually supporting positions. This requires a judicious effort by the commander and his staff in determining the positioning of maneuver forces. The CAB has the ability to defend in restricted and severely restricted terrain with Infantry while also being able to cover mounted avenues of approach or open areas effectively with tanks and BFVs. During the terrain analysis, the commander and staff must look closely for choke points, intervisibility lines, and reverse-slope opportunities in order to take full advantage of the CAB's capabilities to mass firepower while providing protection for the Infantry.

4-26. Once the commander has assigned AOs to his maneuver units, he must determine any potential gaps between units. The CAB should plan to cover these gaps with reconnaissance assets, aggressive patrolling from the company teams and local observation posts. The CAB must plan local counterattacks to isolate and destroy any enemy that manages to penetrate through a gap in the AO. The commander should also plan to reposition units not in contact to mass the effects of combat power against an attacking enemy.

4-27. The need for flexibility through the mobility of mechanized forces requires graphic control measures to assist in maneuver during local counterattacks and repositioning of forces. Specified routes, phase lines, attack- and support-by-fire positions, BPs, EAs, TRPs, and other fire control measures are required to synchronize maneuver effectively.

INTELLIGENCE

4-28. The purposes of the information collection efforts in the security area are to provide the commander with information to support the development of intelligence to aide decision making, to provide early warning and reaction time, and to support target acquisition. Guided by the CCIRs, the information collection plan, fire support plan, and reconnaissance and security assets provide information that includes:

- Location, and movement of reconnaissance assets.

- Speed, direction, composition, and strength of enemy formations.
- Locations of HPTs, such as artillery and rocket units, bridging assets, and C2 nodes.
- Enemy actions at DPs.
- Enemy flanking actions, breaching operations, force concentrations, and employment of enablers.
- Verification of the condition of obstacles and routes.
- Battle damage assessment.
- Movement of follow-on forces.

4-29. The staff must integrate the information provided by the security forces with information received from higher and adjacent units, other subordinates, and sources such as JSTARS and UAS. The total reconnaissance effort must support the commander's decision-making. In an area defense, the commander's critical decisions usually include:

- Initiation and employment of fires against enemy formations.
- Modifications or adjustments to the defensive plan.
- Execution of situational obstacles.
- Withdrawal of forward security forces.
- Commitment of the reserve, counterattack, or both.

4-30. As with all tactical planning, IPB is a critical part of defensive planning. It helps the commander define where to concentrate combat power, where to accept risk, and where to plan potential decisive actions. To aid in the development of a flexible defensive plan, the IPB must present all feasible enemy courses of action. The essential areas of focus are:

- Analyze terrain and weather.
- Determine enemy force size and likely COAs with associated DPs.
- Determine enemy vulnerabilities and HVTs.
- Impact of civilian population on CAB defensive operations.

FIRES

4-31. The CAB might have to rely on its own mortars until supporting artillery is available. The commander should support the unit's decisive operation with priority of fires. The main effort prior to the initiation of the decisive operation will have priority of fires if the operation contains phases. The following are considerations for the fire support plan:

- Allocate initial priority of fires to the forward security force.
- Plan targets along enemy reconnaissance mounted and dismounted avenues of approach.
- Engage approaching enemy formations at vulnerable points along their route of march with indirect fires and CAS, if available.
- Plan the transition of fires to the MBA fight.
- Develop clear triggers to adjust FSCM and priority of fires.
- Ensure integration of fires in support of obstacle effects.
- Ensure integration of fires with CAB counterattack plans and repositioning contingency plans.
- Integrate the emplacement of scatterable mine (SCATMINEs) into the countermobility and counterattack plans (to protect flanks, and so forth).

SUSTAINMENT

4-32. The CAB S-4 must ensure that the sustainment plan is fully coordinated with the FSC commander and the rest of the staff. He coordinates with the S-3 to ensure that supply routes do not interfere with maneuver or obstacle plans, but still support the full depth of the defense. The commander ensures that sustainment operators deliver combat-configured loads to maneuver units on a scheduled basis. Coordination with the S-3 provides engineer and potential MP support to keep supply routes open. The S-4 coordinates with the CBRN officer to ensure there are appropriate routes for contaminated equipment. In addition, the S-4 coordinates with the FSC commander for the possible use of prestocked classes of supply (Class IV and V).

4-33. The commander positions sustainment forces where they can best fulfill its support tasks while using minimal resources to maintain security in conjunction with other units located in the support area. In contiguous operations position sustainment operations far enough away from the FEBA to avoid interfering with the movement of units. In noncontiguous operations sustainment may conduct operations from base clusters within the perimeters of ground maneuver units to provide security and avoid interrupting their sustainment functions. (Refer to FM 3-90-1 for more on sustainment considerations in the defense.)

4-34. Enemy actions and the maneuver of combat forces complicate forward area medical operations. Health service support considerations for defensive operations include:

- Medical personnel have much less time to reach the patient, complete vital emergency medical treatment, and remove the patient from the battle site.
- The enemy's initial attack and the CAB's counterattack produce the heaviest patient workload. These are also the most likely times for enemy use of artillery and CBRN weapons.
- The enemy attack can disrupt ground and air routes and delay evacuation of patients to and from treatment elements.
- The depth and dispersion of the defense create significant time-distance problems for evacuation assets.
- The enemy exercises the initiative early in the operation, which could preclude accurate prediction of initial areas of casualty density. This fact makes effective integration of air assets into the medical evacuation plan essential.

Threats to Sustainment Sites

4-35. During the MBA fight, protection of sustainment sites is necessary to ensure freedom of maneuver and continuity of operations. Because allocating forces against threats to CAB sustainment sites diverts combat power from the MBA, the commander carefully weighs the need for such diversions against the possible consequences to the overall operation. To make such decisions wisely, the commander requires accurate information to avoid late or inadequate responses and to guard against overreacting to exaggerated reports.

4-36. In general, the combat trains rely on positioning, movement, and self-protection for survival. The S-4 plans for sustainment operations in covered and concealed areas away from likely enemy avenues of approach. The commanders responsible for the trains (for example, HHC and FSC commanders) establish and maintain perimeter security, using early warning observation posts, and integrating any weapons and crews that are present into the train's defense. They also keep sustainment nodes postured to move on very short notice as the security situation changes.

4-37. Early warning to sustainment units is critical to their survival in the event of a penetration of the MBA or enemy attack from an unexpected area. Sustainment plans and rehearsals must address actions to be taken in the event of an attack, including defensive measures, displacement criteria, routes, rally points, and subsequent positions to which to move.

PROTECTION

4-38. Air and missile defense (AMD) support to the CAB may be limited. Units should expect to use their organic weapons systems for self-defense against enemy air threats. Plan for CBRN reconnaissance at likely locations where the emeny might conduct a CBRN attack. Use obscurants to support disengagement or movement of forces. Assign sectors of fire to prevent fratricide. Engineer augmentation provides survivability support to the CAB by digging survivability positions and coutermobility tasks.

PREPARATION

4-39. Preparation of the defense includes planning and plan refinement, positioning of forces, constructing obstacles and fighting positions, preparing other survivability requirements, planning and synchronizing fires, positioning logistics, and conducting inspections and rehearsals. Throughout the preparation phase, security operations must continue without interruption. Security forces may be assigned any combination of screen, guard, and area security missions. The scout platoon may be positioned to screen and provide early warning

along most likely enemy avenues of approach, reinforced in depth with sections or platoons from the company teams.

MOVEMENT INTO AN UNSECURED AREA OF OPERATIONS

4-40. The CAB should establish a security force when moving into an unsecured area.. The mission of the security force is to clear the area, check for contaminated areas and obstacles, and establish security for the CAB main body. After clearing the CAB's logistics sites and the area where the company teams will be positioned, the security force should position itself to—

- Prevent enemy observation of defensive positions.
- Defeat infiltrating reconnaissance forces.
- Prevent the enemy from delivering direct fires into the CAB defenses.
- Provide early warning of the enemy's approach.

HOW AND WHERE TO DEFEAT THE ENEMY

4-41. The commander and staff analyze the forces and assets available, paying particular attention to the obstacle assets and fire support allocated by the BCT. The staff must define the engineer and fire support allocation in terms of capability. For example, they should define engineer capability in terms of the number of obstacles of a specific effect, and the number and type of fighting positions engineers can emplace or create in the time available. Fire support analysis should include the number of targets to be engaged, at what point in the battle they should be engaged, and with what expected result.

ENGAGEMENT AREA DEVELOPMENT

4-42. The critical planning piece for both maneuver and fire support during defensive operations is EA development. Although the commander can divide EAs into sectors of fire, he does not position his defensive systems toward the EAs, but toward the avenues of approach. He uses EAs and sectors of fire as tools to optimize the effects of fires, not to restrict fires or cause operations to become static or fixed. The seven steps listed below represent a way to build an EA. Although listed sequentially, some steps (marked by an asterisk) can and should be done concurrently:

- Identify all likely enemy avenues of approach.
- Determine likely enemy concept of operations.
- Determine where to kill the enemy.
- Plan and integrate obstacles.*
- Emplace weapons systems (includes preparation of fighting positions).*
- Plan and integrate indirect fires.*
- Rehearse the execution of operations in the EA.

POSITIONING THE RESERVE

4-43. The commander must designate and position the reserve in a location where it can effectively react to several contingency plans. He must consider terrain, trafficability of roads, potential EAs, probable points of enemy penetrations, and commitment time. The commander can have a single reserve under CAB control, or, if the terrain dictates, the company teams can designate their own reserves. The reserve should be positioned in a covered and concealed position. Information concerning the reserve may be considered essential elements of friendly information (EEFI) and protected from enemy reconnaissance. The CAB commander must give specific planning guidance to the reserve to include priority for planning. METT-TC might require that a CAB commander designate a reserve that can be called upon to accomplish tasks that include focusing on the MBA and responding to other missions needed to help the CAB to accomplish its mission. To generate larger ground maneuver reserves, the CAB commander must redirect company or platoon committed elements after they have accomplished their initial tasks, or when the enemy's defeat frees them for other tasks.

4-44. Speed and agility at the platoon level enable the CAB commander to commit, withdraw, redirect, and recommit the reserve during the fight. This use of the reserve requires the best possible SU and a COP that is

constantly updated with accurate enemy intelligence. Moving a unit from one area (left to right or front to rear) requires each Soldier in the unit to know where he is, and also where both the enemy and friendly forces are located.

4-45. Additionally, the movement of ground forces over the distances expected in an expanded AO requires time. The time and distance relationship, especially under limited visibility conditions and rough terrain, is a key factor in determining which of the CAB units can realistically be considered for a reserve mission that will require a great deal of flexibility in accomplishing multiple missions.

4-46. During preparation of the CAB defense, the CAB reserve sometimes conducts other tasks. The CAB commander might initially position his reserve in a forward location to deceive the enemy, obscure subordinate boundaries, or show strength in an area where he intends to accept risk. The reserve could serve in the CAB's forward security area and provide area security for the logistics sites or unoccupied areas of the CAB's AO. However, the CAB commander must consider the impact of these types of missions on his reserve force's ability to prepare for its critical role as the reserve during the MBA engagement.

4-47. The CAB reserve's commander should also expect to receive specific DPs and triggers for employment on each contingency. This allows the reserve commander to conduct quality rehearsals and to anticipate his commitment as he monitors the fight.

ENGINEER SUPPORT

4-48. The priority of effort transition to countermobility and survivability over mobility requires detailed planning at the CAB level to ensure subordinate engineers have adequate time for TLPs. The TF engineer and the leadership of the supporting engineer unit(s) are key in the development and execution of engineer tasks. The following planning considerations apply to engineer support:

- Position situational obstacles early and link them to natural and other manmade obstacles.
- Plan multiple obstacle locations to support depth and flexibility in the defense. Ensure adequate security for obstacle emplacement systems. Integrate triggers for the execution of situational and reserve obstacles in the decision support template.
- Focus the countermobility effort to encourage the enemy to maneuver into positions of vulnerability where the CAB intends to kill them.
- Ensure adequate mobility support for withdrawing security forces, the reserve, the counterattack force, and the repositioning of MBA forces.
- Ensure the integration of survivability priorities for critical systems and units through the development and implementation of an execution matrix and timeline.

AVIATION SUPPORT

4-49. In defensive operations, the speed and mobility of aviation can help maximize concentration and flexibility. During preparation for defensive operations, aviation units sometimes support the CAB commander with aerial reconnaissance and fires.

4-50. During the defense, aviation forces can attack deep against HPTs, enemy concentrations, and moving columns, and they can disrupt enemy capabilities. Division will likely employ attack reconnaissance helicopter units to attack follow-on echelons before they can move forward to the close battle. Aviation forces might conduct screening operations, and might conduct guard operations of an open flank in conjunction with ground forces.

4-51. Attack reconnaissance helicopters routinely support security area operations and mass fires during the MBA fight. Synchronization of aviation assets into the defensive plan is important to ensure aviation assets are capable of massing fires and to prevent fratricide. Detailed air-ground operation and coordination are necessary to ensure efficient use of aviation assets. If the CAB is augmented with aviation assets, it must give careful consideration to EA development and involve the direct fire planning and the supporting aviation unit, through its aviation LNO, in the planning process.

REHEARSALS

4-52. The CAB and subordinate units should conduct rehearsals to practice their defense against multiple enemy COAs. When conducting rehearsals, all units must consider time, preparation activities, and OPSEC. Rarely will the CAB be able to conduct a full-dress rehearsal given the tempo of operations and the potentially large size of the AO. It may be better for key leaders to conduct map, sketch map, terrain model, or reduced force rehearsal in order to focus their attention on inspecting preparations and working with subordinate leaders. The rehearsal should cover the following:

- Reconnaissance and security operations.
- Battle handover and passage of lines.
- MBA engagement.
- The timelines and associated actions to create, handover, and activate all planned types of obstacles and obstacle groups.
- Reserve employment options.
- Counterattack.
- Actions to deal with enemy penetrations, major enemy efforts along areas of risk or flank avenues of approach.
- Sustainment operations, particularly casualty evacuation and contingency resupply operations.
- Reorganization and follow-on missions to exploit defensive success.
- Integration of aviation assets, if available.

MONITORING DEFENSE PREPARATIONS

4-53. As subordinate units position their elements and execute defensive preparations, the CAB staff monitors and coordinates their activities and the overall situation. The S-2 monitors the enemy situation and focuses on indicators that reveal the enemy's likely time and direction of attack. The staff continually analyzes this assessment to determine the effects on preparation time available. The commander must update his PIR as the situation changes and be prepared to adjust the reconnaissance effort to answer those questions. The S-3 monitors the status of rehearsals and updates the plan as needed based on continuously updated intelligence and the status of preparations. The XO analyzes the status of logistics and equipment maintenance within the CAB to determine any required adjustments to the plan or task organization. The TF engineer monitors the progress of all engineer efforts within the AO. He continually projects the end state of this effort based on the current and projected work rates. He must identify potential shortfalls early and determine how to shift assets to make up for the shortfalls or recommend where to accept risk.

4-54. As the enemy closes on the CAB's AO, the CAB begins final preparations that typically include:

- Final coordination for battle handover and passage of lines.
- Positioning of situational obstacle employment systems.
- Verification of communications status.
- Evacuation of unused Classes IV and V (obstacle materiel and ammunition) to prevent capture or loss to enemy action.
- Withdrawal of engineer forces from forward areas.
- Linkup of mobility, protection, and sustainment assets with reserve or other supported combat forces (if not previously accomplished).
- Review of reconnaissance plan to ensure it still meets the commander's PIR.
- Final positioning or repositioning of reconnaissance assets, security forces, and observers.
- Positioning of teams to close lanes in obstacles or execute reserve obstacles.
- Execution of directed, reserve, or situational obstacles.
- Registration of indirect fire targets with mortars.
- Periodic situation updates and issuing of final guidance to subordinates.

EXECUTION

4-55. As in the offense, the defense follows the same sequence of events, or steps (gain and maintain enemy contact, disrupt the enemy, and fix the enemy, follow through), which may or may not happen sequentially and whose actions often overlap, or occur simultaneously.

4-56. Usually, the BCT has established some form of security before the CAB moves into the area. However, the CAB still must provide for its own security, especially on expanded or complex terrain. If transitioning from an offensive operation, the BCT and CABs establish the security area well beyond the desired MBA site in order to prevent the enemy from observing and interrupting defensive preparations, and identifying unit positions. If they cannot push the security area forward to achieve this, the BCT and its CABs might have to hold their positions initially as they transition and then withdraw units to the defensive MBA, establishing a security force in the process.

GAIN AND MAINTAIN ENEMY CONTACT

4-57. Once security area forces have moved into position, actions in the security area predominantly focus on reconnaissance, security, counter reconnaissance, target acquisition, reporting, delay of the enemy main body, and battle handover. The CAB's security area forces must integrate their actions with friendly forces forward of them, maintaining information flow and security. The CAB's elements may have to execute battle handover with those forward elements and assist them in executing a rearward passage. This is especially likely if the fire elements are assets other than the BCT cavalry squadron, which must move through the CAB AO to recover and prepare for another mission. Similarly, the security area forces must coordinate and crosstalk with the teams to their rear. Eventually, they must execute a rearward passage or move to the flanks of the MBA. On approaches that the enemy does not use, it is usually advantageous to leave elements of the security force forward to preserve observation and access to enemy flanks.

Security Area Engagement

4-58. Engagements in the CAB security area are usually limited. Counter reconnaissance forces focus on locating and destroying enemy reconnaissance elements. The focal points are usually early warning and identification of the enemy's main and supporting efforts in order for the commander to make decisions and position forces.

DISRUPT THE ENEMY

4-59. After making contact with the enemy, the commander seeks to disrupt the enemy's plan and his ability to control forces. As the enemy closes into the area, observers initiate indirect fires and execution of situational obstacles to disrupt the enemy. Ideally, the results of the commander's shaping operations should result in a disorganized enemy.

Execution of Planned Indirect Fires

4-60. The CAB's planned indirect fires usually consist of security force elements' or a FIST's execution of one or two indirect fire targets on a primary enemy avenue of approach. This may be in support of the higher headquarters' scheme of fires since the BCT usually controls artillery assets throughout most of the engagement.

4-61. During the MBA engagement, the BCT and CABs shift combat power and priority of fires to defeat the enemy's attack. This may require:

- Adjusting subordinates' AOs and missions.
- Repositioning of forces.
- Shifting of the main effort.
- Commiting the reserve.
- Modifying the original plan.

4-62. Forward forces, obstacles, and fires within the MBA usually break the enemy's momentum, reduce his numerical advantage, and force his troops into positions of vulnerability. The CAB masses fires (direct and indirect) to destroy attacking enemy forces as they enter the EAs.

4-63. Depending on the defensive scheme, the CAB may conduct delay operations, capitalizing on movement and repeated attacks to defeat the enemy or it may fight primarily from a single series of positions.

Execution of Situational Obstacles

4-64. The purpose of these obstacles is to force premature enemy's deployment, thus slowing his advance. This allows for more effective engagement with indirect fires and, therefore, forces early deployment of enemy breaching assets. These obstacles usually are planned and triggered relative to specific enemy attack options. Situational obstacles may support an essential task for fires support. In this situation, a CAB company team may be employed forward to cover fire support elements with direct fires, and then withdraw to its own defensive positions within the MBA.

FIX THE ENEMY

4-65. The techniques for fixing the enemy in the defense are similar to those discussed in the offense, with the emphasis on shaping operations to constrain the enemy into a desirable COA in order to fix the enemy in a given location. Combat outposts, strong points, and obstacles can deny enemy movement to or through undesirable locations, or avenues.

MANEUVER

4-66. Battle handover is the transfer of responsibility for the battle from the BCT's security area elements to the CABs. The higher commander who established the security force prescribes criteria for the handover and designates the location where it will pass through, routes, contact points, and the battle handover line. The battle handover line is usually forward of the FEBA where the direct fires of the forward combat elements of the CABs can effectively overwatch the elements of the passing unit.

4-67. The CAB commander establishes the criteria for the battle handover prior to the MBA fight, including where it will pass through, and designates routes and contact points. The handover is usually forward of the FEBA where elements of the reconnaissance unit are effectively overwatched by direct fires of the forward combat elements of the CAB. The CAB ensures its coordination with the reconnaissance unit, and with the CAB's company team commanders who will be directly involved in the passing of the reconnaissance elements.Coordination usually includes:

- Establishing communications.
- Providing updates on both friendly and enemy situations.
- Coordinating passage.
- Dispatching representatives to contact points and establishing liaison.
- Establishing recognition signals.
- Checking status of obstacles and routes.
- Establishing fire support , AMD, and sustainment requirements.
- Defining exact locations of contact points, lanes, and other control measures.
- Synchronizing actions to assist the reconnaissance element's RPOL in or out of contact.

Main Battle Area Actions

4-68. The CAB seeks to defeat the enemy's attack forward of or within the MBA. If the CAB can bring sufficient firepower to shape the enemy in the security area fight, an MBA engagement might not occur. If so, then the BCT can rapidly transition and move its CABs into a strong counterattack. However, the BCT and the CABs usually defend over a large area, and enemy strength often forces a MBA engagement. The CAB commander integrates an MBA engagement that is a combined arms fight using both direct and indirect fires, and reinforced with obstacles. The BCT continues to focus artillery, CAS, and attack aviation in an effort to attack the enemy continuously throughout the depth of the battlefield. In this case, long-range fire support to the

CABs might be limited to critical points and times in the MBA fight. Combining all available fires with maneuver, obstacles, and reserve elements, the CAB commander seeks to destroy the enemy or force his transition to a retrograde or hasty defense. The BCT usually specifies control measures to coordinate and focus the defensive operation.

FOLLOW THROUGH/COUNTERATTACK

4-69. Following a successful defense, there might be a period of confusion that the defender can exploit. Given the information capabilities of the CAB, counterattacks can be executed quickly before the enemy can secure his gains or organize a defense. METT-TC, information collection results, and the higher commander's concept of operations dictate the CAB's follow-on mission.

4-70. If the situation prevents offensive action, the CAB continues to defend. As in the initial establishment of the defense, gaining security area space is critical. A local counterattack can provide space for a security area and time to reorganize. Any attack option must pay particular attention not only to the terrain and enemy, but also to friendly obstacles (and their destruction times if applicable) and areas where dual-purpose improved conventional munitions or bomblets have been used. If the CAB cannot counterattack to gain adequate security space, then the CAB may have to direct a company team to maintain contact with the enemy and guard the AO while other moves to reestablish the defense farther to the rear. Whether continuing to defend or transitioning to offensive tasks, the CAB must quickly reorganize.

MOBILE DEFENSE

4-71. *Mobile defense* is a defensive task that concentrates on the destruction or defeat of the enemy through a decisive attack by a striking force. (ADRP 3-90) Mobile defense focuses on destroying the attacking force by allowing enemy to advance into a position that exposes the enemy to counterattack and envelopment. The commander uses the fixing force to hold attacking enemy forces in position, help channel attacking enemy forces into ambush areas, and retain areas from which to launch the striking force. A mobile defense requires an AO of considerable depth.

4-72. The commander must be able to shape the battlefield, causing an enemy force to overextend its lines of communication (LOCs), expose its flanks, and dissipate its combat power. Likewise, the commander must be able to move friendly forces around and behind the enemy force targeted to be cut off and destroyed. Divisions and larger formations normally execute mobile defenses. However, the CAB generally conducts an area defense or a delay as part of the fixing force as the commander shapes the enemy's penetration, or they attack as part of the striking force.

> ***Note.*** Units smaller than a division do not usually conduct a mobile defense because of their inability to fight multiple engagements throughout the width, depth, and height of their AO, while simultaneously resourcing the striking, fixing, and reserve forces.

FIXING FORCE OR STRIKING FORCE

4-73. The CAB, as part of a larger organization, participates in a mobile defense as either part of the fixing force or part of the striking force, but not both. As part of the fixing force, the CAB defends within its assigned AO, although the AO might be larger than usual. As part of the striking force, the CAB plans, rehearses, and executes offensive tasks.

4-74. The term "striking force" is used rather than the term "reserve" because reserve indicates an uncommitted force. The striking force is a committed force and has the resources to conduct a counterattack as part of the mobile defense. The striking force engages the enemy as they become exposed in their attempts to overcome the fixing force. Because the striking force normally attacks a moving enemy force, it is usually Armor heavy.

4-75. Risks to the mobile defense include:

- Becoming isolated and defeated in detail.
- Enemy operations may impair the ability of the striking force to react at critical points.
- Enemy may be able to confuse friendly forces as to its main attack.

- Increased criticality of mobility support requirements.
- Increased potential for fratricide.

DEPTH OF MOBILE DEFENSE

4-76. A mobile defense requires considerable depth in the AO in order for the commander to shape the battlefield, causing the enemy to extend his lines of communication and support, expose his flanks, and dissipate his combat power. The terrain must allow the commander to maneuver to attack an enemy flank or rear.

RETROGRADE

4-77. The retrograde is a type of defensive tasks that involves organized movement away from the enemy. (FM 3-90-1) The enemy may force these operations or a commander may execute them voluntarily. The CAB conducts retrograde operations to improve a tactical situation or to prevent a worse situation from developing. CABs usually conduct retrogrades as part of a larger force but may conduct independent retrogrades as required, such as when conducting an area or point raid. In either case, the CAB's higher headquarters must approve the operation.

4-78. Retrograde operations accomplish the following:

- Resist, exhaust, and defeat enemy forces.
- Draw the enemy into an unfavorable situation.
- Avoid contact in undesirable conditions.
- Preserve friendly combat power.
- Gain time.
- Disengage a force from battle for use elsewhere in other missions.
- Reposition forces, shorten lines of communication, or conform to movements of other friendly units.

4-79. The three forms of retrograde operations are:

- **Delay.** This operation trades space for time and preserves friendly combat power while inflicting maximum damage on the enemy.
- **Withdrawal.** A withdrawal is a planned, voluntary disengagement from the enemy, which may be conducted with or without enemy pressure.
- **Retirement.** A retirement is an operation in which a force that is not in contact with the enemy moves to the rear in an organized manner.

Note. Maintaining morale is essential among subordinate leaders and troops in a retrograde operation. Movement to the rear may seem like a defeat or a threat of isolation unless Soldiers have confidence in their leaders, and know the purpose of the operation and their roles in it.

DELAY

4-80. A delay is a form of retrograde in which a force under pressure trades space for time by slowing down the enemy's momentum and inflicting maximum damage on the enemy without, in principle, becoming decisively engaged. (FM 3-90-1) It is critical that the commander's intent defines what is more important in the mission: time, damage to the enemy, or force protection. Inflicting damage is usually more important than gaining time. The BCT commander establishes risk levels for each delay but maintaining freedom of action and avoiding decisive engagement are ordinarily of ultimate importance. The CAB may execute a delay when it has insufficient combat power to attack or defend, or when the higher unit's plan calls for drawing the enemy into an area for a counterattack, as in a mobile defense. Following is a brief discussion for planning, preparing and executing a delay.

4-81. Delays gain time to:

- Allow other friendly forces to establish a defense.
- Cover a withdrawing force.

- Protect a friendly force's flank.
- Allow other forces to counterattack

Forms of Delay

4-82. Based upon the commander's intent and METT-TC, the two types of delay missions are delay within an AO or delay forward of a specific control measure.

Delay Within an Area of Operations

4-83. Higher command might assign the CAB to delay within an AO. The higher commander usually provides guidance regarding intent and desired effect on the enemy, but he minimizes restrictions regarding terrain, time, and coordination with adjacent forces. This form of a delay is usually assigned when force preservation is the highest priority, and there is considerable depth to the BCT or division's AO.

Delay Forward of a Specified Line for a Specified Time

4-84. Higher command assigns the CAB a mission to delay forward of a specific control measure for a specific period of time. This mission is assigned when the CAB must control the enemy's attack and retain specified terrain to achieve some purpose relative to another element, such as setting the conditions for a counterattack, for completion of defensive preparations, or for the movement of other forces or civilians. The focus of this delay mission is clearly on time, terrain, and enemy destruction. It carries a much higher risk level for the CAB, with the likelihood that all or part of the unit will become decisively engaged. The CAB commander controls the movement of his forces by using a series of delay lines. Delay lines are phase lines that indicate the date and time before which the enemy is not allowed to cross.

Planning the Delay

4-85. The delay requires close coordination of forces and a clear understanding by subordinates of the concept of operations and commander's intent. The potential for loss of control is very high in delay operations, making crosstalk and coordination between subordinate leaders extremely important. Subordinate initiative is critical, but it must be in the context of close coordination with others. Plans must be flexible, with control measures throughout the AO allowing forces to be maneuvered to address all possible enemy COAs.

4-86. The commander determines the end state of the delay based on the higher commander's intent and specific parameters of the higher headquarters' delay order. The commander considers the factors of METT-TC, especially the effects of the terrain, to identify advantageous locations from which to engage the enemy throughout the depth of the AO. Specific delay planning considerations the commander and staff must determine include:

- Force array and allocation of enablers, particularly fires and obstacles.
- Where and when to accept decisive engagement.
- Acceptable level of risk for each subordinate force.
- Form of delay and control measures (company teams delay in AO, control by BPs, or some other method).
- Maintaining adequate mobility to facilitate the delay.
- Integration of obstacle intent and essential tasks for fire support.
- Likely subsequent mission, transition point(s), and conditions.

Delay Organization

4-87. The CAB's organization of its forces depends on how the BCT has structured its forces (unless the CAB operates independently). The BCT usually organizes into a security force, main body, and reserve, but a wide AO may preclude the use of BCT-controlled security forces and reserves. In this case, the BCT can direct the CAB to organize its own security, main body, and reserve forces, the same as if the CAB were operating independently. The brigade commander can designate a CAB, or companies within the CAB, as the security or reserve force for the BCT. If the CAB has to establish a security force, it usually uses the scout platoon as a screen force positioned to observe the most likely enemy avenues of approach and to initiate indirect fires to

slow and weaken the enemy. Initially, the CAB main body usually locates well forward in the AO, and then fights from a series of subsequent positions. The reserve force is used to defeat enemy penetrations or to assist units with breaking contact.

Delay Scheme of Maneuver

4-88. The scheme of maneuver must allow the CAB to determine the pace of the delay and maintain the initiative. The commander selects positions that allow his forces to inflict maximum damage on the enemy, support their disengagement, and enable their withdrawal. (See Figure 4-3.) He may choose to delay from successive or alternating delay positions depending on the strength of the teams and the width of the AO.

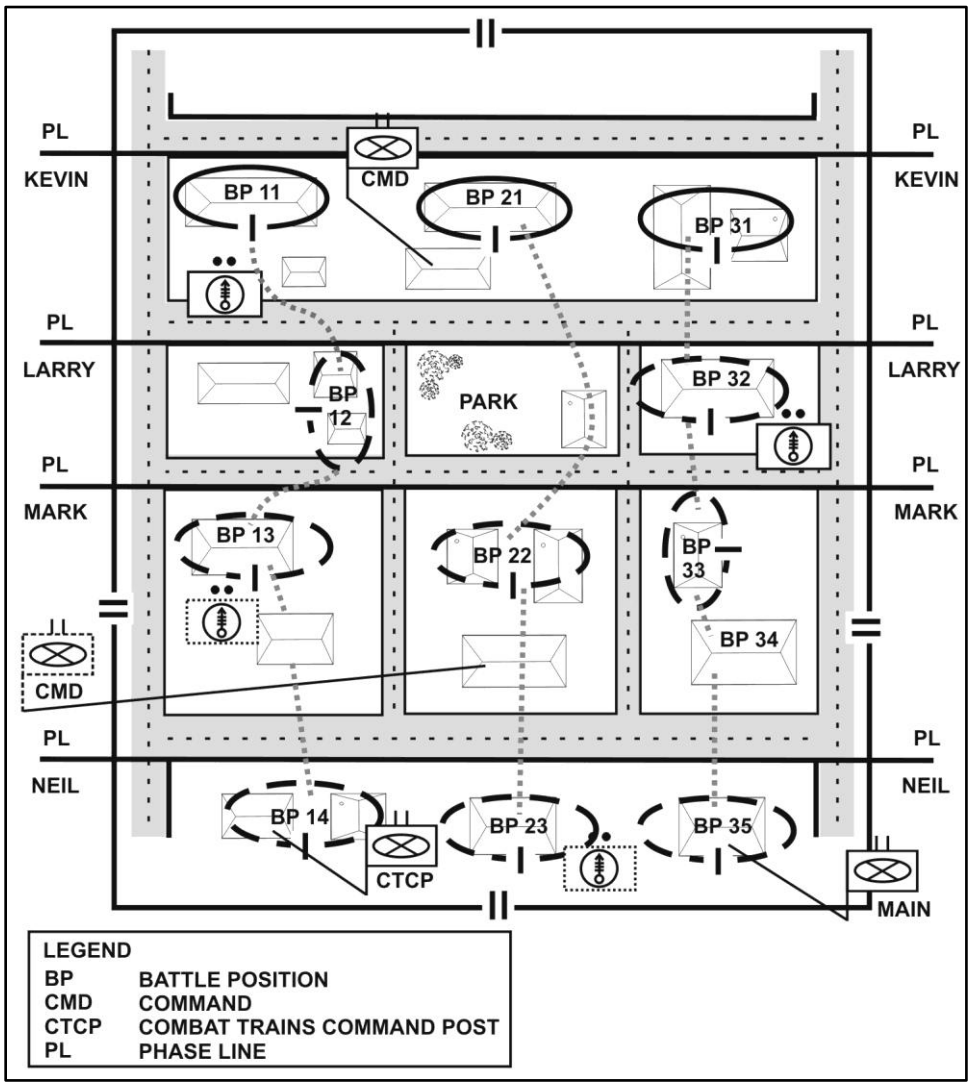


Figure 4-3. CAB delay in a urban area

Alternate and Subsequent Positions in a Delay

4-89. In planning, if the commander chooses to delay using BPs, he can use either alternate positions or subsequent positions. In both techniques, the delaying forces maintain contact with the enemy between delay positions. Table 4-1 shows the advantages and disadvantages of the two techniques. (Refer to FM 3-90-1 for more information.)

Table 4-1. Comparison of methods of delay

Method of Delay	*Use When*	*Advantages*	*Disadvantages*
Delay from subsequent positions.	AO is wide. Forces available are not adequate to be positioned in depth.	Reduced fratricide risk. Ease of mission command. Repeated rearward passages not required.	Limited depth to the delay positions. Easier to penetrate or isolate units. Less time available to prepare each position. Less flexibility.
Delay from alternate positions.	AO is narrow. Forces are adequate to be positioned in depth.	Allows positioning in depth. Harder for enemy to isolate units. More flexibility.	More difficult mission command; requires continuous coordination. Requires passage of lines, increasing vulnerability and fratricide potential.

WITHDRAWAL

4-90. Joint doctrine defines a withdrawal operation as a planned retrograde operation in which a force in contact disengages from an enemy force and moves in a direction away from the enemy. (JP 1-02) Units might or might not conduct withdrawals under enemy pressure. Following is a brief discussion for planning, preparing and executing a withdrawl. (Refer to FM 3-90-1 for more information.)

Forms of Withdrawl

4-91. The two types of withdrawals are assisted and unassisted. The commander's intent and METT-TC determine which type of withdrawal the units use.

Assisted Withdrawal

4-92. The assisting force occupies positions to the rear of the withdrawing unit and prepares to accept control of the situation. In addition, it can assist the withdrawing unit with route reconnaissance, route maintenance, fire support, and sustainment. Both forces closely coordinate the withdrawal. After coordination, the withdrawing unit delays to a BHL, conducts a passage of lines, and moves to its final destination.

Unassisted Withdrawal

4-93. The withdrawing unit establishes routes and develops plans for the withdrawal, then establishes a security force as the rear guard while the main body withdraws. Sustainment and protection elements usually withdraw first, followed by combat forces. To deceive the enemy as to the friendly movement, the BCT or CAB might establish a detachment left in contact (DLIC) if withdrawing under enemy pressure. As the unit withdraws, the DLIC disengages from the enemy and follows the main body to its final destination.

Organization of a Withdrawal

4-94. As with the delay, the CAB structures its force into a security force, main body, and reserve. It can elect to use a single company team, or elements of a company team as the security or reserve force. It also can organize a DLIC or stay-behind forces, if required by the enemy situation. If operating independently, the CAB organizes itself in the same manner.

Security Force

4-95. The security force maintains contact with the enemy until ordered to disengage or until another force takes over the task. It simulates the continued presence of the main body, which requires additional allocation of enablers beyond that usually allocated to a force of its size.

Detachment Left in Contact

4-96. The DLIC is an element that is left in contact as part of the previously designated (usually rear) security force while the main body conducts its withdrawal. Its purpose is to remain behind to deceive the enemy into believing the CAB is still in position, while the majority of the unit withdraws. The DLIC should be one of the strongest of the subordinate units with the most capable leadership.

Planning a Withdrawal

4-97. Because the force is most vulnerable if the enemy attacks, the commander and staff usually plan for a withdrawal under enemy pressure. They also develop contingency plans for a withdrawal without enemy pressure. During planning, the commander and staff consider the following:

- Disengagement criteria (time, friendly situation, enemy situation).
- Plan for a deliberate break from the enemy.
- Plan for deception to conceal the withdrawal for as long as possible.
- Displace the main body rapidly, free of enemy interference.
- Safeguard of withdrawal routes.
- Plan for breaching, gap crossing, or bypassing obstacles that hinder the withdrawal.
- Create obstacles between the enemy and the DLIC to complicate pursuit.
- Retain sufficient maneuver and functional and multifunctional support and sustainment/combat service support capabilities throughout the operation to support forces in contact with the enemy.

Withdrawal Scheme of Maneuver

4-98. A withdrawal may be assisted or unassisted and may take place with or without enemy pressure. The plan considers which of the variations the CAB faces based on the higher headquarters' order and the enemy situation. Some other considerations include:

- The element that will be the DLIC or rear guard must transition to cover the CAB's AO. Simultaneously, the CAB must prepare its sustainment assets and the remainder of the force to begin a rapid withdrawal to the rear. The CAB should seek to move on multiple routes to gain speed and shorten formations.
- The CAB commander essentially has two options for breaking contact, break contact using deception and stealth or break contact quickly and violently under the cover of supporting fires reinforced by obstacles to delay pursuit.
- When conducting a withdrawal without enemy pressure, the commander can focus the plan on the best method to displace forces rapidly. He can take prudent risks that increase his force's displacement capabilities.

Preparation

4-99. The commander prepares the CAB for the withdrawal through inspections and rehearsals in the same fashion as discussed with other defensive operations. Inspections focus on subordinate unit preparations to ensure a clear understanding of the concept of operations and commander's intent.

Execution

4-100. Execution of the CAB withdrawal essentially follows this pattern:

- Task-organizing and positioning security and deception forces.
- Reconnoitering withdrawal routes and subsequent positions.
- Preparing obstacles and fighting positions to support the DLIC and withdrawal.
- Preparing wounded Soldiers, damaged equipment, and nonessential supplies for movement.
- Positioning selected mobility and countermobility assets to respond to events that affect the withdrawal.
- Moving nonessential mobility, protection, and sustainment units to the rear.
- Positioning MPs and other assets for traffic control.

- Initiating movement, leading with forward security forces.
- The DLIC's breaking of contact and movement as a rear guard.

Concealing the Withdrawal

4-101. The first priority is to conceal the withdrawal from the enemy. As the BCT or CAB initiates the initial movement of forces, it must take measures to deceive the enemy and to maintain OPSEC.

Actions on Contact in a Withdrawal

4-102. Security forces counter any enemy attempts to disrupt the withdrawal or pursue the BCT or CAB. If the security force and the reserve cannot prevent the enemy from closing on the main body, the commander commits some or all of the main body to prevent the enemy from interfering further with the withdrawal.

Termination of the Withdrawal

4-103. Once the BCT or CAB successfully disengages from the enemy, it usually has the following options:

- Rejoin the overall defense.
- Transition into a retirement.
- Continue moving away from the enemy and toward its next mission area.

RETIREMENT

4-104. A retirement is a retrograde operation in which a force that is not in contact with the enemy moves to the rear in an organized manner. The CAB conducts a retirement as part of the BCT to reposition for future operations. The CAB usually organizes itself with security, main body, and reserve elements, depending on the situation and where the CAB is in the movement scheme. The commander and staff develop a movement plan based on the terrain, friendly situation and commander's guidance, and enemy situation. During preparations, BCT and CAB units conduct rehearsals and prepare for movement. During a retirement, the BCT and its CABs usually move to assembly areas to prepare for future operations. (Refer to FM 3-90-1 for more information.)

SECTION III – FORMS OF DEFENSE

4-105. Subordinate forms of defense have special purposes and have their own unique planning considerations. The Army recognizes three forms of defense:

- Defense of a linear obstacle.
- Perimeter defense.
- Reverse-slope defense.

DEFENSE OF A LINEAR OBSTACLE

4-106. The commander may conduct an area or mobile defense along or behind a linear obstacle. When incorporating a linear obstacle into a mobile defense the commander may accept some risk by giving the enemy the opportunity to cross a portion of the obstacle in efforts to channel forces into engagement areas or routes advantageous to the defense. When defending from a linear obstacle such as a mountain range or river, the CAB can dig in to protected positions and prepare to reinforce any successful penetration into the linear defense. A disadvantage to the defense of a linear obstacle is the depth it provides the defender.

PLANNING THE DEFENSE OF A LINEAR OBSTACLE

4-107. The commander applies the same considerations he would apply to an area and mobile defense when planning to defend a linear obstacle. While the linear obstacle may provide increased natural protection, it may offer the enemy the ability to exploit a penetration. The commander should consider how to best institute economy of force to concentrate effects in the event of any successful penetration along the breadth of the defense.

PERIMETER DEFENSE

4-108. A perimeter defense is a defense oriented in all directions. The CAB and company teams use it for self-protection, and to protect other units located within the perimeter. The unit establishes a perimeter defense when it must hold critical terrain in areas where the defense is not tied in with adjacent units. Units may also form a perimeter when they have been bypassed and isolated by the enemy and must defend in place. These differences are in contrast to the strong point defense, in which the position is tied in with the rest of the defense and considerable time and resources are spent to prepare the ground.

4-109. In an urban environment, a CAB may form a perimeter defense around key terrain, such as a public utility, communications center, government center, or traffic circle that enhances movement. It may protect facilities useful to their sustainment, or the welfare, economy, and support of the local populace such as a water purification plant or refinery. (Refer to ATTP 3-06.11 for more information.)

PLANNING PERIMETER DEFENSE

4-110. While in a perimeter defense, units should consider:

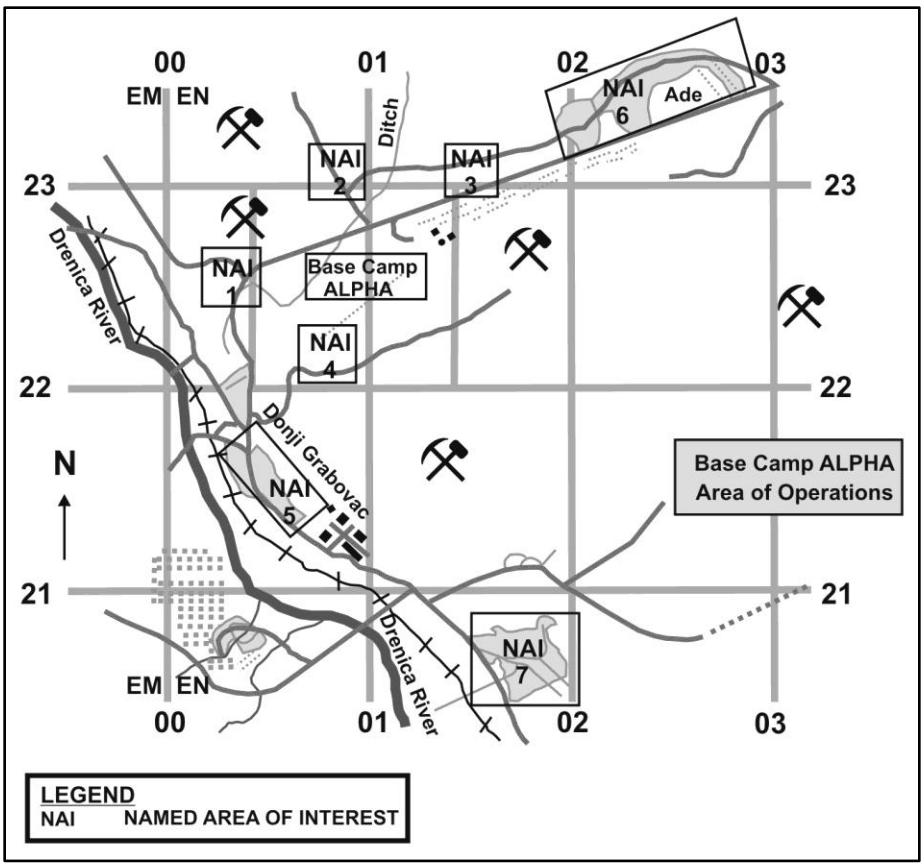
- Placing security as far out as possible.
- Positioning Armor and antiarmor weapons in protected positions, and concentrating their fires on Armor avenues of approach and related EAs.
- Maintaining a reserve.
- Retaining key terrain.
- Establishing a location of the reserve.
- Maintaining mission command.
- Ensuring the continuation of sustainment operations and sustainment security.

DEFENSE OF A BASE

4-111. The CAB can establish bases to provide support for tactical operations. These bases are areas or compounds set up for temporary (or longer duration) operations and may include a helicopter landing zone (LZ). They are similar to combat outposts, but larger. (Refer to FM 3-34.400 and ATP 3-37.10 for more information.)

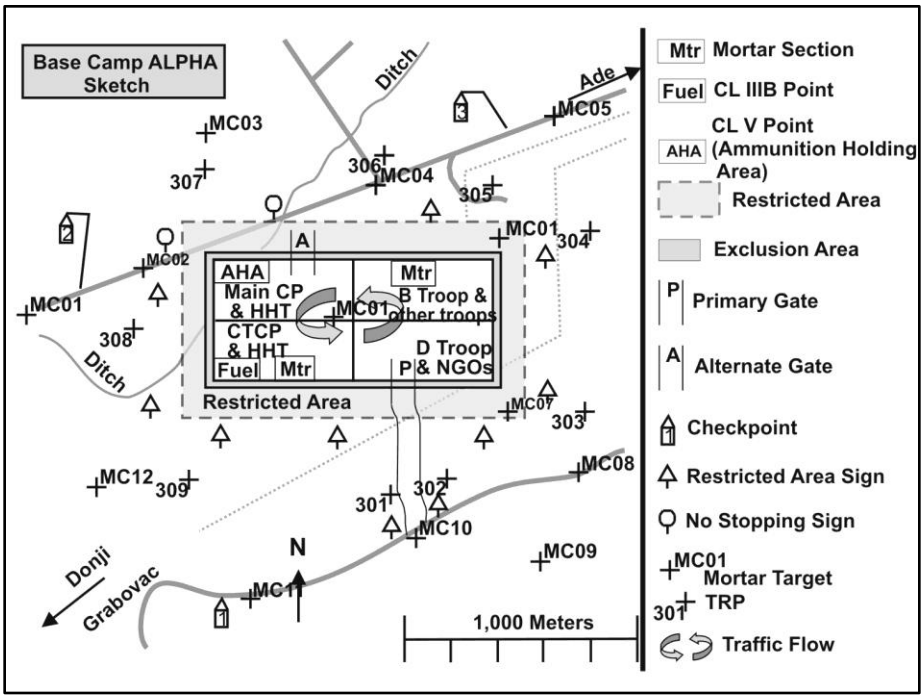
4-112. The base defense plan should include a security plan that provides time and space for the operational area security force to react. Figure 4-4 depicts an information collection sketch for conducting surveillance of the key terrain around the base camp. Those NAIs at longer distances from the base camp may be monitored by higher headquarters (for example, UAS). Figure 4-5 depicts a base camp defense sketch. Although defense of a base is similar to that of a perimeter defense, commanders need to consider several additional factors:

- Establishment of a base defense operations center.
- Implementing a base defense communications network.
- Establishing and rehearsing base defense TACSOP to include all non-CAB tenant units.
- Integrating intrusion detection systems as a base defense multiplier.
- Implementing perimeter security to include entry control points, and personnel and vehicle search procedures.
- Employing checklists for force protection operations, quick reaction force organization and employment, and site security assessment.



4337

4338 **Figure 4-4. Base camp information collection sketch**



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4340 **Figure 4-5. Base camp sketch**

REVERSE-SLOPE DEFENSE

4-113. The CAB organizes a reverse-slope defense to use a topographical crest to mask the defender from the attacker's observation and from supporting direct fire. (See Figure 4-6.)

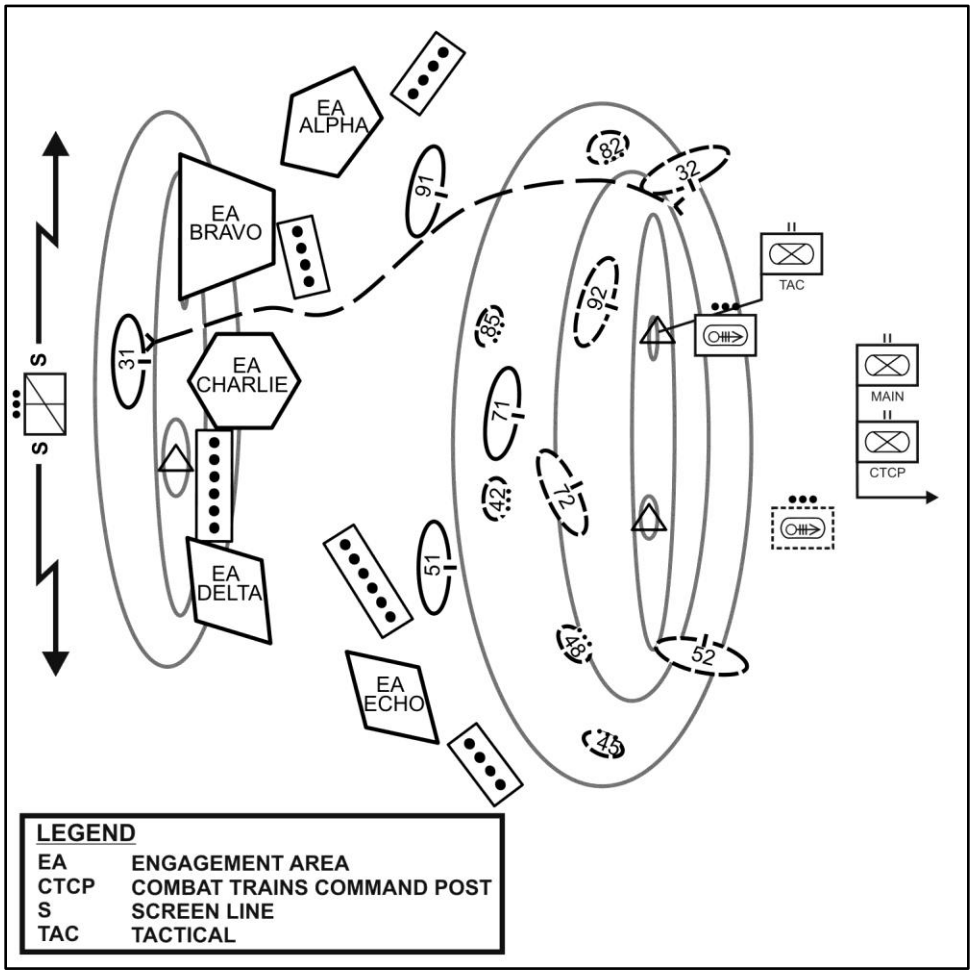

Figure 4-6. CAB reverse-slope defense

PLANNING FOR A REVERSE-SLOPE DEFENSE

4-114. The CAB commander can adopt a reverse-slope position for elements of the CAB when:

- Enemy fire makes the forward slope untenable.
- Lack of cover and concealment on the forward slope makes it untenable.
- The forward slope has been lost or has not yet been gained.
- The forward slope is exposed to enemy direct fire weapons fired from beyond the effective range of the defender's weapons. Moving to the reverse slope removes the attacker's standoff advantage.
- The terrain on the reverse slope provides better fields of fire than the forward slope.
- The defender must avoid creating a dangerous salient or reentrant in friendly lines.
- Surprising and deceiving the enemy as to the true location of the CAB defensive positions is essential.

FORWARD EDGE OF THE POSITION

4-115. The forward edge of the position should be far enough from the crest that fields of fire allow the defender time to place well-aimed fire on the enemy before he reaches friendly positions.

FLANKING FIRES

4-116. A reverse-slope position is most effective when units on adjacent terrain can place flanking fires on the forward slope.

SECURITY FORCE

4-117. The units should establish a security force to the front to stop or delay the enemy, to disorganize his attack, and to deceive him as to the location of the defensive position. When this security element withdraws, the unit must maintain observation, indirect fire, and security to the front.

OBSERVATION POSTS

4-118. The unit establishes observation posts on or forward of the topographical crest. This allows long-range observation over the entire front and indirect fire coverage of forward obstacles. Observation posts are usually provided by the unit that owns the terrain being observed, and may vary in size from a few Soldiers to a reinforced squad. They should include FOs. At night, their number should be increased to improve security.

SECTION IV – DEFENSIVE DIRECT FIRE CONTROL

4-119. Defensive fire control and fire planning are key elements of successful defensive tasks. Since CABs are likely to conduct defensive tasks against enemy forces with numerical superiority, it is vital that the CAB commander and staff have a thorough understanding of direct fire planning. The CAB S-3 section reviews company OPORDs to ensure an integrated and synchronized direct fire plan plan and execution. The principles of direct fire planning remain unchanged from offensive tasks.

PRINCIPLES OF FIRE CONTROL

4-120. The principles of fire control in the defense are the same as those in the offense. They include:

- Mass the effects of fire.
- Destroy the greatest threat first.
- Avoid target overkill.
- Employ the best weapon for the target.
- Minimize friendly exposure.
- Prevent fratricide.
- Plan for extreme limited visibility conditions.
- Develop contingencies for diminished capabilities.

FIRE CONTROL MEASURES

4-121. Application of fire control measure concepts, procedures, and techniques assists the unit in acquiring the enemy, focusing fires on him, distributing the effects of the fires, and preventing fratricide. At the same time, no single measure is sufficient to control fires effectively. (See Table 4-2.) Fire control measures are effective only if the entire unit has a common understanding of what they mean and how to employ them.

Table 4-2 Common defensive control measures

Terrain-Based Fire Control Measures	Threat-Based Fire Control Measures
Engagement area (EA)	Trigger
Maximum engagement line (MEL)	Engagement techniques
Final protective line (FPL)	Target array
Direction of fire	Weapons control status
Terrain-based quadrant	Engagement priorities
Friendly-based quadrant	Rules of engagement (ROE)
Target reference point (TRP)	Weapons ready posture
Restrictive fire line (RFL)	Weapons safety posture
Sector of fire	Fire patterns

TRIGGER LINE

4-122. A trigger line is a phase line located on identifiable terrain that crosses the engagement area–used to initiate and mass fires into an engagement area at a predetermined range for all or like weapon systems. (ADRP 1-02) Commander can use a trigger line to specify the circumstances in which subordinate elements are to engage enemy forces. For example, the trigger for a friendly platoon to initiate engagement could be three or more enemy combat vehicles passing or crossing a given trigger line. This line can be any natural or man-made linear feature, such as a road, ridgeline, or stream. It could also be a line perpendicular to the unit's orientation, delineated by one or more reference points.

SECTION V –TRANSITIONS

4-123. During the planning for any operation, the CAB commanders and staffs must discern from the higher headquarters OPORD what the potential follow-on missions are and begin to plan how they intend to achieve them. The principle concerns are the same when transitioning. Whether the CAB is concluding an offensive or defensive operation, it must pause to consolidate and reorganize before the next operation. A successful defense often allows the CAB to transition to an attack, at other times to return to stability tasks.

4-124. Transitioning to the offense depends on defeating the enemy decisively and recognizing that defeat promptly. The ABCT commander must provide the planning and warning that precedes these transitions. CAB and company team commanders must be ready to confirm sensor indications of enemy condition and to recommend transition to the offense as they sense the enemy's defeat.

CONSOLIDATION

4-125. Consolidation considerations are the same as in the offense. Some of the considerations such as reestablishing communication and security and maintaining contact are readily achieved after a successful area defense, which relied on them throughout the defense. After a mobile defense, or retrograde operations consolidation may require more time to achieve. Commanders might need to consolidate in order to reorganize, avoid culmination, prepare for an enemy counterattack, or allow time for movement of adjacent units.

4-126. The CAB may be directed to maintain contact with the enemy by redirecting reconnaissance and security assets, directing small-unit patrols, and possibly conducting limited objective attacks. In some situations, the CAB might retain control of key terrain or complete clearing the objective while the remainder of the ABCT transitions to a new mission.

REORGANIZATION

4-127. All units undertake reorganization activities during operations as the situation allows for maintaining combat effectiveness. After the CAB defeats an enemy attack, a more extensive reorganization can occur. Reorganization tasks usually include those items listed for the offense in chapter three. (Refer to FM 3-90-1.)

CONTINUING OPERATIONS

4-128. At the conclusion of an engagement, the CAB and its subordinate units may continue the defense, or if ordered, transition to offensive or stability tasks. All commanders consider their higher commander's concept of operations, friendly capabilities, and the enemy situation when making this decision. All missions should include plans for exploiting success or assuming a defense.

OFFENSE

4-129. Higher commanders may order the subordinate unit to conduct a hasty attack, movement to contact, or participate in exploitation. In some cases, the defensive operation might immediately transition into a pursuit. If reorganization is required, the echelon maintains pressure on the enemy through artillery, CAS, and limited objective attacks while any necessary reorganization takes place.

STABILITY

4-130. Commanders take care in planning transitions from defensive tasks to stability tasks and vice versa. Subordinate commanders and leaders look for ways to recognize activities that would initiate this transition. Commanders, staffs, and Soldiers need to be aware that elements of the CAB could be conducting offensive, defensive, and stability tasks simultaneously within a small radius of each other. Actions in one unit's AO can affect a change in whatever type operation an adjacent unit is conducting. For example, an offensive operation may result in displacing noncombatants to another section of the city, thus creating a requirement for stability tasks for the unit in that AO. (Refer to FM 3-90-1 for more information.)

Chapter 5

Stability

"Peace is a daily, a weekly, a monthly process, gradually changing opinions, slowly eroding old barriers, quietly building new structures."

John F. Kennedy

U.S. forces conduct stability tasks to deter war, resolve conflict, promote peace, strengthen democratic processes, retain U.S. influence or access abroad, assist U.S. civil authorities, and support moral and legal imperatives. These actions include a wide range of activities. They provide policy makers with options to pursue national policy objectives. U.S. forces can use stability tasks to complement any combination of the other elements of national power.

Stability tasks restore, establish, preserve, and secure areas, populations, and resources. They are fundamental to the conduct of Unified Land Operations: How the Army seizes, retains, and exploits the initiative to gain and maintain a position in sustained land operations through simultaneous offensive, defensive, and stability tasks in order to prevent or deter conflict, prevail in war, and create the conditions for favorable conflict resolution. (ADRP 3-0)

SECTION I – STABILITY TASKS

5-1. Ideally, the CAB receives advance notice of stability missions and has time to complete a preparatory training program before deploying. At other times the battalion may deploy to conduct offensive and defensive tasks initially with the goal to transition to stability tasks once the necessary conditions have been achieved. In those cases, the unit relies on its training in the fundamental warfighing functions and trains to specific mission stability tasks during the operation.

5-2. Stability tasks vary by the operational (PMESII-PT) and mission variables (METT-TC) present in the operational environment. The CAB performs many familiar core tactical missions and tasks during stability tasks. The purposes of operations, the special constraints on commanders, and the unique missions and tasks, however, differentiate stability tasks from other operations.

5-3. This section provides an introductory discussion of stability tasks. (Refer to ADRP 3-07, ATP 3-07.5 and FM 3-57 for more information.) Although the CAB can be assigned missions within all of these categories, its firepower, protection, and maneuverability make it more suited for the following operations:

- Foreign internal defense.
- Security force assistance.
- Show of force.

5-4. Stability tasks leverage the coercive and constructive capabilities of the military force and are a key component of unified land operations conducted in a peacetime environment, during conflict, or in a post-conflict situation. As offensive tasks clear areas of hostile forces, the CAB (or follow-on forces) must ensure the security of critical infrastructure and provision of essential services. Commanders are legally obligated to minimize and relieve civilian suffering. Leaders must promptly inform their higher headquarters of civilian requirements and conditions that require attention. Unified action is crucial. Transitions to civil authority require the coordination and integration of both civilian and military organizations.

5-5. The combination of tasks conducted by the CAB during stability tasks depends on METT-TC. In some operations, the host nation government can meet/satisfy most of the needs of its population. Conversely, Army

forces operating in a failed state may be responsible for the well-being of the local populace. That situation requires Army forces to work with civilian agencies to restore basic capabilities. There are five primary stability tasks, in which none are performed in isolation. (Refer to ADRP 3-07 for more information.)

ESTABLISH CIVIL SECURITY

5-6. Establishing civil security involves providing for the safety of the host nation and its population, including protection from internal and external threats. It includes potentially physically disbanding armed groups, removing the means of combat from former combatants and belligerents. These tasks help provide effective security for the local populace by reducing their exposure to the threat of violent conflict.

5-7. Ideally, the CAB defeats external threats posed by enemy forces that can attack population centers. Simultaneously, they assist host-nation police with internal security against criminals and small, hostile groups. Civil security is required for the other stability tasks to be effective.

ESTABLISH CIVIL CONTROL

5-8. Establishing civil control is a preliminary step toward establishing rule of law and stable, effective governance. While establishing civil security is the first responsibility of military forces in a stability operation, they can only accomplish it by also restoring civil control. Civil control regulates selected behavior and activities of individuals and groups. It reduces risk to individuals or groups and promotes security. Initial response tasks aim to develop interim mechanisms for establishing rule of law. Transformation tasks focus on restoring an indigenous form of justice system and processes for reconciliation.

5-9. The CAB assists with the establishment of public order and safety by protecting vulnerable elements of the population, such as dislocated civilians, ensuring humanitarian aid access and safeguarding key witnesses, or detaining perpetrators to ongoing investigations. CAB personnel can also support law enforcement and police reform by augmenting civilian police forces and at times provide training and capacity building until civilian agencies or military police can assume this role. Other examples of support include assisting with curfews and traffic checkpoints, as well as physically segregating former warring factions and/or non-state actors. (Refer to ATTP 3-39.10 for more information.)

RESTORE ESSENTIAL SERVICES

5-10. In restoring essential services, the CAB generally centers its efforts on the initial response tasks supporting the establishment or restoration of the most basic civil services. These are the essential food, water, shelter, and medical support necessary to sustain the population until local civil services are restored. Other civilian agencies and organizations focus on broader humanitarian issues and social well-being to establish the foundation for long-term development and resolving the root causes of conflict. The CAB may provide, or assist other government, intergovernmental, and host-nation agencies.

5-11. Once immediate needs are satisfied restoring basic services and transitioning control to civil authorities becomes the focus of government and civilian agencies. Essential services include sewage, water, electricity academics, trash, medical, safety, and other considerations (SWEAT-MSO). The CAB may support some of these efforts through continued security tasks, or provide some functional support like medics and transportation.

SUPPORT TO GOVERNANCE

5-12. If the host-nation government cannot adequately perform its basic civil functions, then some degree of military support to governance may be necessary. Military support to governance focuses on restoring public administration and resuming public services while fostering long-term efforts to establish a functional, effective system of political governance. The support provided by military forces helps to shape the environment for extended unified action by other partners. Support to governance tasks establish conditions that enable interagency and host-nation actions to succeed. The CAB commander focuses on transferring control of governance efforts to a legitimate civil authority according to the desired end state.

SUPPORT TO ECONOMIC AND INFRASTRUCTURE DEVELOPMENT

5-13. Support to economic and infrastructure development helps a host nation develop capability and capacity in these areas. It may involve direct and indirect military assistance to local, regional, and national entities. CABs are capable of coordinating with local officials/elders to fund limited projects using a commander's emergency response program. These limited projects can support the local economy, and assist with rebuilding the local infrastructure by providing employment opportunities, infusing monetary resources into the economy and stimulating market activity. It is important for military leaders to understand the economic fundamentals of the area to prevent artificial conditions that may not endure long term.

SECTION II – PLANNING CONSIDERATIONS

5-14. Stability tasks tend to be decentralized and conducted over extended distances, with the exception of specific actions undertaken in combating terrorism, support to counterdrug operations, and noncombatant evacuation operations. As decentralized operations, the units' activities consist largely of separated small unit operations conducted across an assigned sector or AO. To encourage cooperation from indigenous forces and gain popular support, the CAB must conduct these operations with consistency, impartiality, and discipline. During transitions from offense or defense to stability tasks, commanders and staffs must quickly assess their civil considerations in terms of the relevant factors of ASCOPE.

5-15. Commanders must emphasize cooperating and communicating with joint headquarters, multinational units, civilian authorities, and nongovernmental organizations. Additionally, commanders must empower subordinate leaders to develop, within the rules of engagements, close associations with the populations of the AOs. This empowerment typifies many stability tasks.

UNIT INTEGRATION

5-16. When operating inside a multinational organization, commanders should expect to integrate units down to the company level for combat units and to the individual level for support units. Commanders should train with this reality in mind. Units operate under established procedures modified to agree with the standard operating procedures for the alliance or coalition. It is accepted that effectiveness initially decreases when operating in a multinational force, but through training and understanding of standards and procedures, unit performance will improve.

INTERAGENCY COORDINATION

5-17. One factor that distinguishes stability tasks from offensive and defensive tasks is the requirement for interagency coordination at the battalion-level and below. In interagency operations, Army commanders have inherent responsibilities including the requirements to clarify the mission; to determine the controlling legal and policy authorities; and to task, organize, direct, sustain, and care for the organizations and individuals for whom they provide the interagency effort. They also assure seamless termination under conditions that ensure the identified objectives are met and can be sustained after the operation.

SUSTAINMENT REQUIREMENTS

5-18. The operational environment the CAB faces during stability tasks has special logistics considerations. These can include:

- Reliance on local procurement of certain items.

Note. Local contracting might need to be split between belligerent parties.

- Class IV supplies for construction of fixed observation posts and checkpoints.
- Use of existing facilities or new construction for quarters; water, sewer, and power utilities; and reinforced hardstand areas for maintenance.
- Barriers or berms to protect ammunition and fuel.

- Special Class V supply requirements, such as pepper spray.
- Reliance on bottled water and contracted food service.
- Use of female Soldiers to assist with searching host-nation female suspects.
- Special FHP considerations include:
- Extended operations in one location may require dedicated sanitation and personal hygiene facilities.
- Sustained exposure to possible threat attack might lead to exhaustion and increases the possibility of combat operational stress reaction.
- Care of detainees (for example EPWs and civilian internees).

RULES OF ENGAGEMENT

5-19. ROE are directives issued by competent military authority that delineate the circumstances and limitations under which United States forces will initiate or continue combat engagement with other forces encountered. (ADRP 3-0) ROE reflect the requirements of the law of war, operational concerns, and political considerations when military force shifts from peace activities to combat operations and back to the peace phase of an operation. These requirements are the primary means the commander uses to convey legal, political, diplomatic, and military guidance to the military force for handling the crisis in peacetime. The ROE is not just restricted to units conducting stability tasks, but applies acrosstasks that the CAB excute.

5-20. The ROE restrict the use of military force in order to achieve the political objectives. In all operations, the commander is legally responsible for the care and treatment of civilians and property in the AO until transferred to proper authorities. The ROE assist the commander in fulfilling these responsibilities. They vary in different conflicts and often change during the respective phases from combat or crisis through peace building or nation assistance.

5-21. The ROE must be consistent with training and equipment capabilities. When necessary, command guidance clarifies the ROE. While the rules must be tailored to the situation, commanders should observe that nothing in such rules negates their obligation to take all necessary and appropriate action in unit self-defense, allowing Soldiers to protect themselves from deadly threats. The ROE can rule out, or impose special limitations on the use of weapons. Examples include the requirements for warning shots, single-shot engagements, and efforts to wound rather than kill. A CAB deploying for stability mission trains its Soldiers to interpret and apply the ROE effectively. It is imperative for everyone to understand the ROE since small unit leaders and individual Soldiers must make ROE decisions promptly and independently.

5-22. Changes to the ROE can result from immediate tactical emergencies at the local level. The commander should be able to request changes to the ROE. Changes are requested through the operational chain of command and must be approved by the designated authority, usually division or higher-level command. Commanders at all levels need to know the request channels for ROE as well as the procedures to obtain approval for recommended changes to the ROE. Situations requiring an immediate change to the ROE could include introduction of combat forces from a hostile nation, attacks by sophisticated weapons systems including weapons of mass destruction, or incidents resulting in loss of life. These situations should be wargamed and special instructions included in all OPORD and FRAGORDs that specifically state when and how commanders at all levels can adjust the ROE.

5-23. The ROE are established for, disseminated down to, and understood by individual Soldiers. However, the ROE cannot cover every situation. Soldiers at all levels must understand the intent of the ROE and act accordingly despite any military disadvantage that may occur. The commander responsible for ROE formulation should consider including an intent portion that describes the desired end state of the operation as well as conflict termination considerations. The intent portion should provide a framework for a proportionate response in the use of force. These considerations assist commanders and leaders at all levels in situations not clearly addressed in an OPORD. Further, ROE must be an integral part of all predeployment training. (Refer to AR 350-1 and FM 27-10 for more information.)

LEVERAGE SPECIAL OPERATIONS FORCES, JOINT, INTERAGENCY, AND MULTINATIONAL COOPERATION

5-24. As with all operations, unity of effort is fundamental to success. SOF forces may have operated in the CAB AO prior to CAB deployment. The nature of SOF operations involves being familiar with the local culture and the abilities of host-nation forces and civil authorities. Although SOF units might not directly operate with the CAB, they are an excellent source of intelligence. Similarly, the CAB's joint, interagency, and multinational partners may be able to provide valuable information on terrain, threats, and the local populace in the AO. Incorporating these personnel and their knowledge into planning work groups can aide in a greater understanding of the pulse of the population and physical environment highlights, such as holy sites and key facilities and positively influence.

ENHANCE HOST-NATION LEGITIMACY

5-25. Army forces consciously enhance host-nation credibility and legitimacy by demonstrating the proper respect for the host-nation's government, police, and military forces. Within the restrictions of international law and U.S. policy, commanders use host-nation forces and personnel for all possible activities. Within its capabilities, a host nation should take the lead in both developmental and security activities. When host-nation capabilities prove inadequate for the task, Army forces enhance those capabilities through training, advice, and assistance.

POTENTIAL FOR UNINTENDED CONSEQUENCES OF ACTIONS

5-26. The actions of individuals and units can have consequences disproportionate to the level of command. When members of U.S. units display a lack of discipline or participate in lawlessness, they can destroy weeks and months of effort and, in some cases, can have strategic consequences. On the other hand, Soldiers and leaders who are disciplined, proficient, and knowledgeable in stability tasks can create the opportunity for disproportionate positive consequences, while limiting the risk for negative consequences.

ACT DECISIVELY TO PREVENT ESCALATION

5-27. Decisive actions reassure allies regarding our strength and resolve and deter adversaries. Failure to act decisively can cause a loss of respect for the force. A loss of respect for the capabilities or will of the force to accomplish its mission can embolden adversaries, and therefore weaken the trust of the supported population—making the mission much more difficult. The nature of stability tasks ordinarily constrains forces in the ways and means available to accomplish military objectives. However, when action is necessary, stability tasks are characterized by initiative, speed, and determination. Units and individuals pursue military objectives energetically and apply military power forcefully, if required. Army forces may act decisively to dominate a situation by force, or negotiate to settle disputes. Without hesitation, they ensure mission accomplishment as well as protection of themselves, the people, and facilities under their charge.

APPLY FORCE SELECTIVELY AND DISCRIMINATELY

5-28. Forces apply combat power selectively in accordance with assigned missions and prescribed limitations. Commanders ensure that their units apply force consistent with assigned objectives, and not excessively. Excessive force can lead to the loss of sympathy and support from local and international community. Inadequate force can jeopardize mission accomplishment, and adversely affect the local populace and domestic support. Ordinarily, the local commander is best qualified to estimate the degree of force that must be used, consistent with established ROE. (Refer to ADRP 1 and JP 3-0 for more information.)

5-29. Army forces must be prepared for combat when conducting stability tasks. Consistent with mission constraints, units display preparedness by routinely conducting demanding combined arms training in the AO. The force demonstrates strength and resolve, without being threatening. The force should convey to all parties the breadth and depth of the resources available. To do so, it must be present in the communities and ensure (consistent with the demands of OPSEC) that the public knows the ROE and associated graduated response

levels. The training should include challenging Soldiers to react to situations at all levels in the areas of weapons use, levels of force, and ROE.

SECTION III - EXECUTING STABILITY TASKS

5-30. Leaders often plan and conduct stability tasks in concert with those outside the U.S. military. Army forces are often the supporting organization rather than the lead agency. However, the efforts of all involved must be coordinated toward a unified effort. Commanders use liaison elements and coordination centers to facilitate unity of effort. Commanders should be flexible in modifying standard mission command arrangements to meet specific requirements of each situation and to promote unity of effort.

ESTABLISHING A COMMON OPERATIONAL PICTURE

5-31. Commanders must achieve mass, concentration, and their objective. In addition, they must not become so decentralized as to piecemeal their efforts. The CAB creates and maintains a COP, utilizing both analog and digital systems, which give the commander improved situational understanding. This improved SU enables him to command dispersed elements of the CAB while retaining the flexibility to quickly mass forces at the decisive point on the battlefield.

MAINTAINING COMMUNICATIONS

5-32. When conducting stability tasks, communications can be difficult. In addition to problems of compatibility and security, many participants do not have enough communications equipment to meet mission requirements. Communication planners should play an active role in the initial operations planning process to identify the required communications architecture to interconnect the CAB with all of its military and civilian partners. Liaison teams, with adequate communications gear, can reduce the severity of some of these problems.

5-33. SATCOM are needed to provide communications between the higher-level headquarters. Other space-based services, such as weather reporting and use of global positioning systems, might also be needed. Communications planners must anticipate these requirements during initial deployment planning, evaluate host-nation communications resources, and integrate them into the overall communications structure. Continual centralized interfacing between key communications planners during planning, rehearsal, and operational phases helps alleviate interoperability issues. Planners should address issues of spectrum management and controls on access to information systems early in planning. The loss of space-based communications due to enemy activity remains a major concern for U.S. Army forces conducting deployed operations. Whether the interruption of the communications is caused by enemy action against satellites or through the use of intermittent jamming/spoofing, the resulting "black-out" will require U.S. forces to adapt and adjust until the capability is restored. Short term losses or disruptions of SATCOM will have to be mitigated through alternative communications methods and courier networks.

DECENTRALIZED EXECUTION

5-34. Subordinate commanders need maximum flexibility in executing their missions. Their commander should give them specific responsibilities and ensure they understand his intent.

5-35. Given the volatile and politically charged nature of most stability tasks, individual and small unit actions can have consequences disproportionate to the level of command or amount of force involved. In some cases, tactical operations and individual actions can have strategic consequences. Preventing these problems requires disciplined, knowledgeable leaders and Soldiers at every level who clearly understand the CAB commander's intent.

MISSION DEBRIEFINGS

5-36. When conducting stability tasks, the S-2 should plan for debriefing any missions that occur outside forward operating bases (FOBs). Soldiers on convoys, patrols, and LOGPACs have the capability to observe subtle changes in terrain, road conditions, civilian activity, and other indicators that are of intelligence value

when reported. The use of digital cameras, along with mission prebriefings and debriefings should be standardized in the unit TACSOP.

SECTION IV - TRANSITIONS

5-37. Transitions could signal the next phase of an operation (such as a transfer to civilian authority) or as a result of the changes in the operational environment. Regardless of the reason, transitions put the force in a vulnerable position and require advanced planning and preparation.

TRANSITION TO OFFENSE

5-38. Stability tasks may require a unit to rapidly transition to the offense. Commanders must ensure that detailed offensive tasks are indentified and part of the planning of stability tasks.

TRANSITION TO DEFENSE

5-39. As with planning for transitions to the offense, transitioning to the defense also requires prior planning. The ability of a unit to transition back and forth between these tasks is critical to the success of stability tasks.

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Chapter 6

Sustainment

"The last 50 kilometers are the toughest in logistics. That's where our papers get graded."
Brigadier General Vincent Boles

Sustainment is the provision of logistics, personnel services, and HSS necessary to maintain operations until mission accomplishment. (ADRP 4-0) The provision of sustainment is an integrated process (people, systems, materiel, health services, and other support) inextricably linked to operations. The forward support company has greatly reduced the CAB commander and staff's technical oversight responsibilities for supply, transportation, and maintenance. Although the BSB provides technical oversight to the FSC, the sustainment function is critical. The CAB commander and staff still bear the responsibility of describing the requirements in the concept of support, and integrating that support into the CAB's concept of operations. Because of their criticality and proximity to combat operations, medical platoons remain organic to CAB.

SECTION I – SUSTAINMENT FUNCTIONS AND ORGANIZATIONS

6-1. The CAB commander ensures that sustainment is provided for organic and attached elements and ensures OPCON or supporting units receive necessary support from the proper headquarters. Based upon guidance from the CAB commander and XO, the S-4 coordinates sustainment for the attachments and verifies who is to provide this support and how it is to be requested. When a large attachment joins the CAB, the attachment should bring an appropriate slice of logistics assets from its parent unit. The CAB S-4 provides guidance to these assets as well as those of the FSC. The attached unit leaders must coordinate with the CAB S-1 and furnish a copy of the unit battle roster. Thereafter, the attached unit submits reports and requests resupply according to the CAB TACSOP.

SUSTAINMENT FUNCTIONS

6-2. The *sustainment warfighting function* is the related tasks and systems that provide support and services to ensure freedom of action, extend operational reach, and prolong endurance. (ADRP 3-0) Sustainment is the provision of logistics, personnel services, and HSS necessary to maintain and prolong operations until mission accomplishment. Logistics tasks include: maintenance, transportation, supply, field services, distribution management, operational contract support, and general engineering support. Personnel services tasks include: human resources, financial management, legal, religious, and band support. HSS consists primarily of casualty care, medical evacuation (air and ground), and medical logistics.

SUSTAINMENT STAFF

6-3. The sustainment staff has to be tied into every aspect of operations. They must monitor operations throughout and anticipate the needs of the CAB. They are subject matter experts in their areas and be adaptable to any unforeseen situation. The CAB S-1 and S-4 are the two primary staff officers and sections responsible for sustainment along with the medical platoon leader.

SUSTAINMENT ORGANIZATIONS

6-4. Sustainment organizations are those that by design or mission provide one or more of the elements of sustainment (logistics, personnel services, or HHS).

BATTALION MEDICAL PLATOON

6-5. The medical platoon provides Role 1 medical support to the CAB and the supporting FSC. The medical platoon triages, treats, and evacuates casualties or returns them to duty. It stocks medical supplies and provides Class VIII support to company medical teams. It performs operator maintenance of the battalion's medical equipment and coordinates for biomedical equipment repair through the BSMC. The medical platoon's survivability and mobility are increased by the use of Armored evacuation vehicles and aid stations. The medical platoon leader/physician and physician assistant oversee BAS operations. (Refer to FM 4-02 for more information.) The medical operations officer, a medical service corps officer, coordinates the operations, administration, and logistics of the medical platoon. His duties include the following:

- Overseeing the daily administrative and logistical operations for the medical platoon.
- Coordinating medical evacuations of patients to the BSMC.
- Supporting medical platoon personnel that are providing direct support to the maneuver companies.

BATTALION HEADQUARTERS AND HEADQUARTERS COMPANY

6-6. The battalion HHC is responsible for the administrative and sustainment support for the HHC and battalion staff and its command posts. It has a supply section to provide unit-level supply and armorer support to the Soldiers and equipment of the battalion headquarters.

BRIGADE SUPPORT BATTALION

6-7. The BSB is the BCT's organic sustainment unit. The BSB commander, assisted by the support operations officer (SPO) manages sustainment operations (including HSS) for the BCT commander. The SPO is the key interface between the supported units and the BSB. The SPO plans and monitors support operations, and makes necessary adjustments to ensure support requirements are met. The SPO requests and coordinates augmentation with the higher echelon when requirements exceed capabilities. The BSB also has a sustainment automation management officer who assists with maintenance of logistics-related standard Army management information systems (STAMIS), very small aperture terminal (VSAT), and combat service and support automation information systems integrated throughout the BCT.

6-8. The BSB can have up six FSCs and three other companies in addition to its HHC. (See Figure 6-1.) The BSB companies are:

- Distribution company.
- Field maintenance company.
- Brigade support medical company.
- Forward support companies (one for each CAB, cavalry squadron, and field artillery battalion).

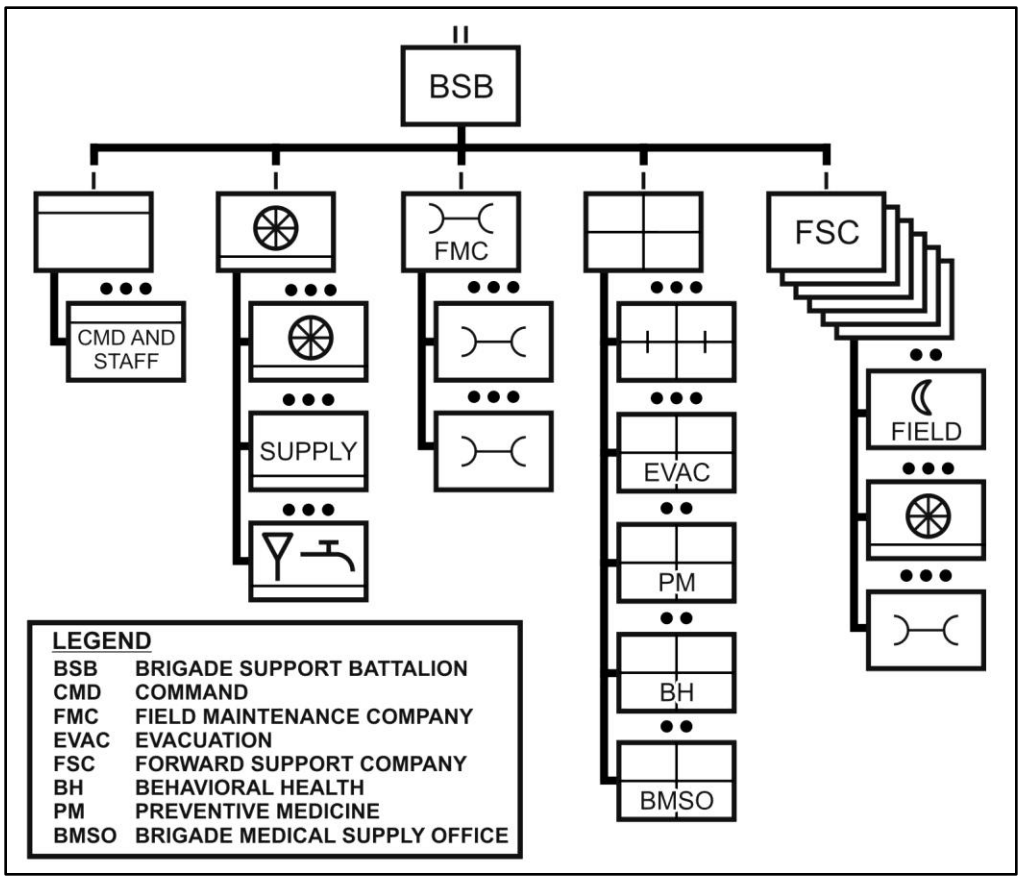

Figure 6-1. BSB organization

FORWARD SUPPORT COMPANY

6-9. The role of the FSC is to provide direct logistics support to the supported battalion. The FSC provides the supported commander with dedicated logistics assets organized specifically to meet the battalion's requirements. An FSC provides field feeding, bulk fuel, general supply, ammunition, and field maintenance. The FSC commander receives technical logistics oversight and mentoring from the BSB commander. FSC commanders must have a continuous relationship with the BSB SPO. The BSB commander will utilize the SPO to ensure that all FSC commanders understand the BSB commanders brigade logistics support plan. The FSC commander is the senior logistician for the CAB. The FSC commander assists the battalion S-4 with the battalion logistics planning and is responsible for executing the logistics plan in accordance with the BSB and supported battalion commander's guidance. FSC commander is responsible for executing the sustainment plan in accordance with the CAB commander's guidance. The FSC receives supplies and specialized maintenance support from the BSB. (Refer to FM 4-0 for more information.) The FSC is organized as in Figure 6-2 to support—

- Food and water (Class I).
- Fuel (Class III).
- Ammunition (Class V).
- Repair parts (Class IX).
- Maintenance and recovery.
- Supply and distribution.

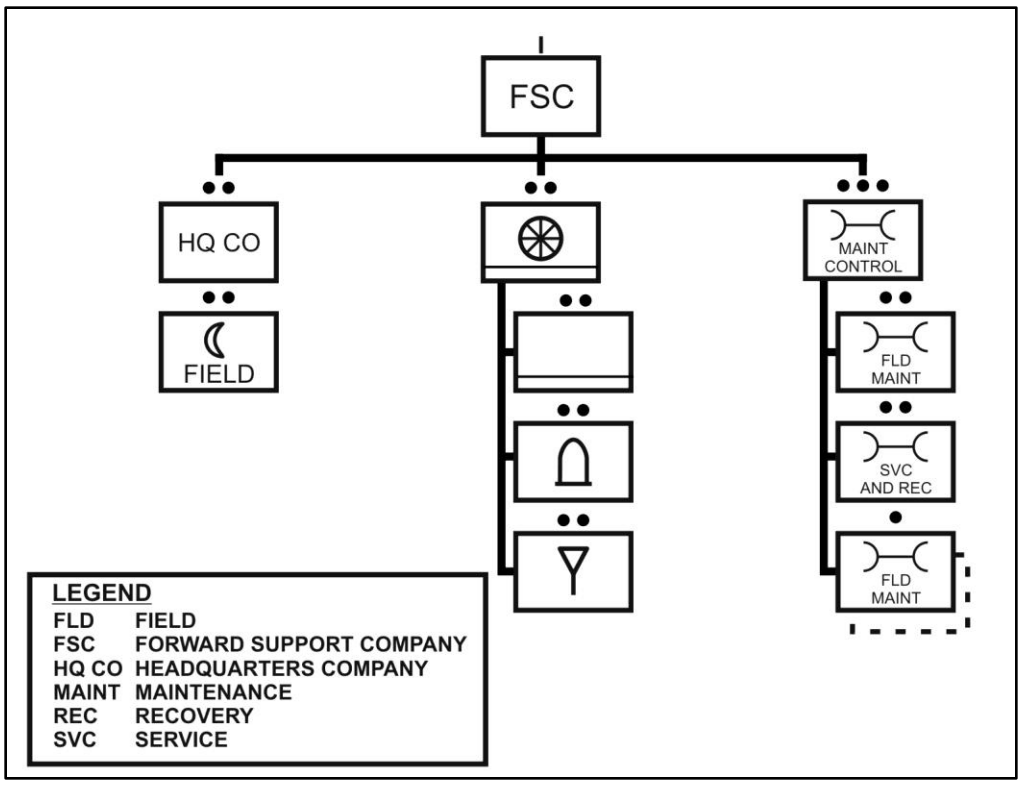

Figure 6-2. Forward support company

6-10. The FSCs normally operate in close proximity to the battalion. The location of the FSC is determined by the battalion. The distance separating the FSC and the battalion is METT-TC dependent and will vary based upon the mission, situation, and environment. The FSC has distinct field maintenance teams to support each Armor and mechanized Infantry company. These teams generally have a direct support relationship to their supported companies.

BATTALION TRAINS OPERATIONS

6-11. Trains are a unit grouping of personnel, vehicles, and equipment to provide sustainment. It is the basic sustainment tactical organization. The CAB uses trains to array its subordinate sustainment elements, including their FSC. Battalion trains usually are under the control of the battalion S-4, and assisted by the battalion S-1. The composition and location of battalion trains varies depending on the number of units attached to, or augmenting, the battalion.

6-12. Battalion trains can be employed in two basic configurations: as unit trains in one location or as echeloned trains.

- Echeloned trains can be organized into company trains, battalion combat trains, or battalion field trains. Figure 6-3a provides an example of echeloned trains.
- Unit trains at the battalion level are appropriate when the battalion is consolidated, during reconstitution, and during major movements. Figure 6-3b provides an example of combined trains.

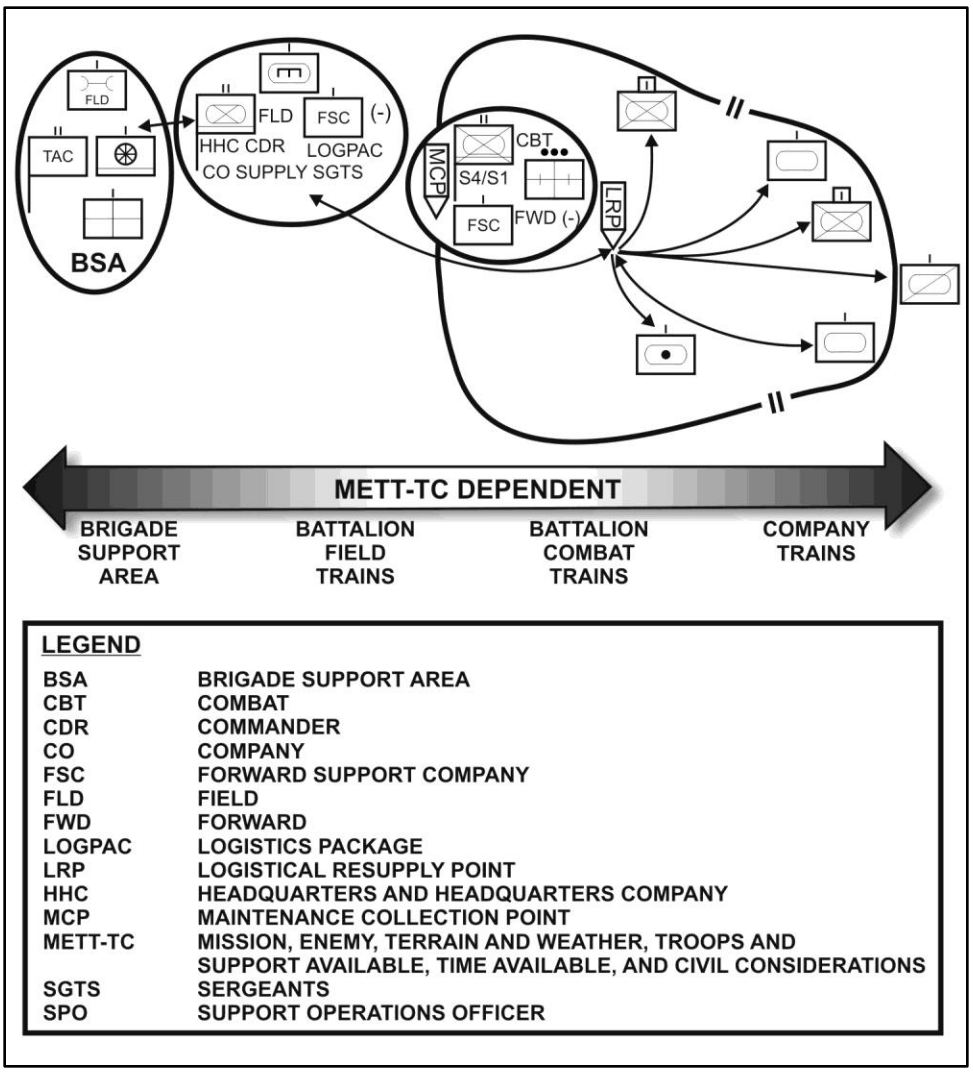

Figure 6-3a. CAB trains during offense or defense

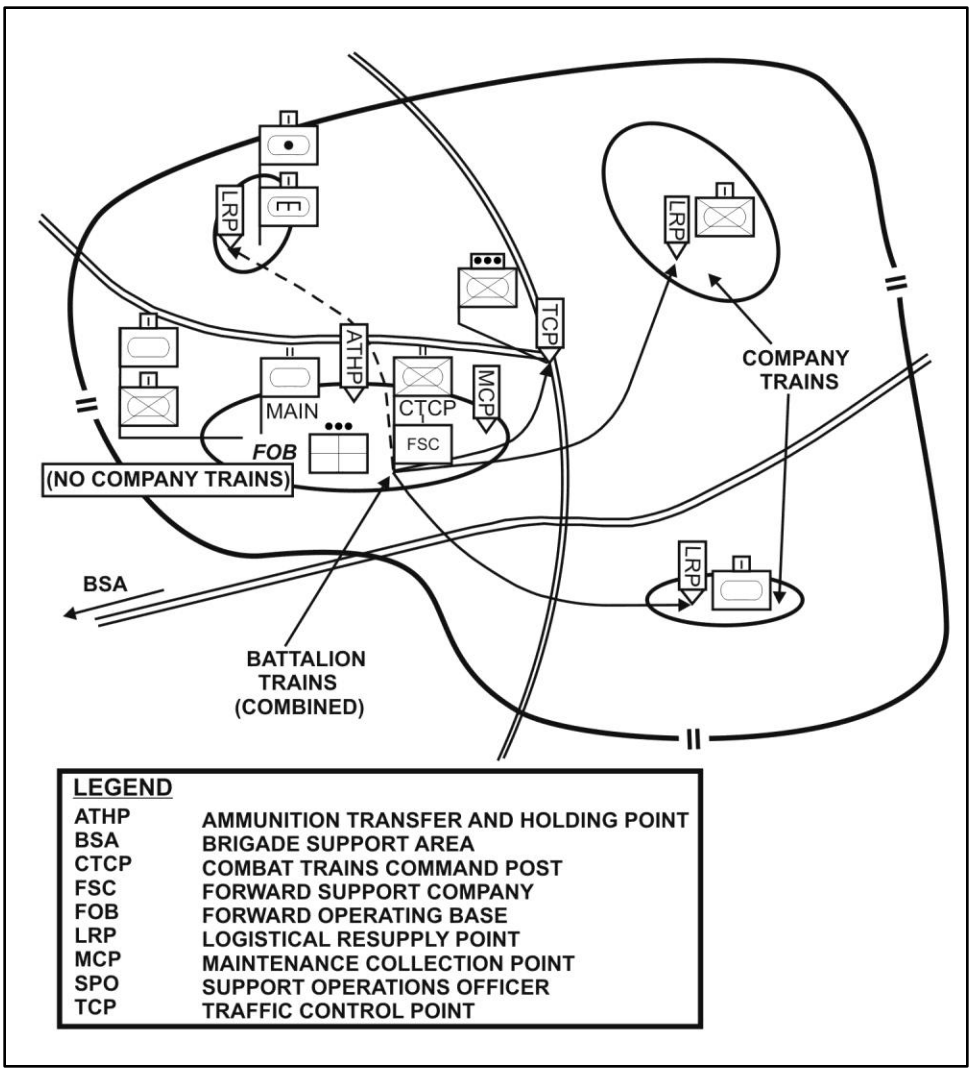

Figure 6-3b. CAB trains during stability tasks

BATTALION TRAINS

6-13. Battalion trains consist of two types: combat trains and field trains. The CAB commander directs the establishment and movement of combat trains and field trains in the battalion OPORD.

Field Trains

6-14. Field trains are not normally located in the BSA and include those assets not located with the combat trains. The field trains can provide direct coordination between the battalion and the BSB. When organized, the field trains usually consist of the elements of the FSC, battalion HHC, battalion (BN) S-1, and battalion S-4. The FSC facilitates the coordination and movement of support from the BSB to the battalion. Generally, field trains are located between 4 and 12 kilometers away from the battalion's combat operations. This allows the field trains to be outside of the enemy's artillery range.

6-15. The CAB company supply sergeants generally position themselves with the FSC. They assist the FSC in preparing company LOGPACs and then move their vehicles forward to the LRP. The company 1SG or his representative meets the LOGPAC and guides it to the company resupply point.

Combat Trains

6-16. The combat trains usually consist of the MCP, BAS, and emergency resupply trucks (for example Classes III and V). (See Figure 6-4.) The MCP should be positioned where recovery vehicles have access, or where major or difficult maintenance is performed. The factors of METT-TC must be considered when positioning the combat trains. Generally, combat trains are located between 1 and 4 kilometers away from the company's combat operations. This allows the combat trains to be outside of the enemy's mortar range. The following factors govern the positioning of the combat trains:

- Communications are required between the CTCP, the CAB Main CP, the CAB FTCP, BCT main CP, the BSB CP, and forward units.
- Room for dispersion and cover and concealment from both air and ground observation are desired.
- The ground must support tracked and wheeled vehicle traffic.
- A suitable helicopter landing site for medical evacuation should be nearby.
- Routes to LRPs or to company locations must be available.
- Movement into and out of the area must not be restricted.

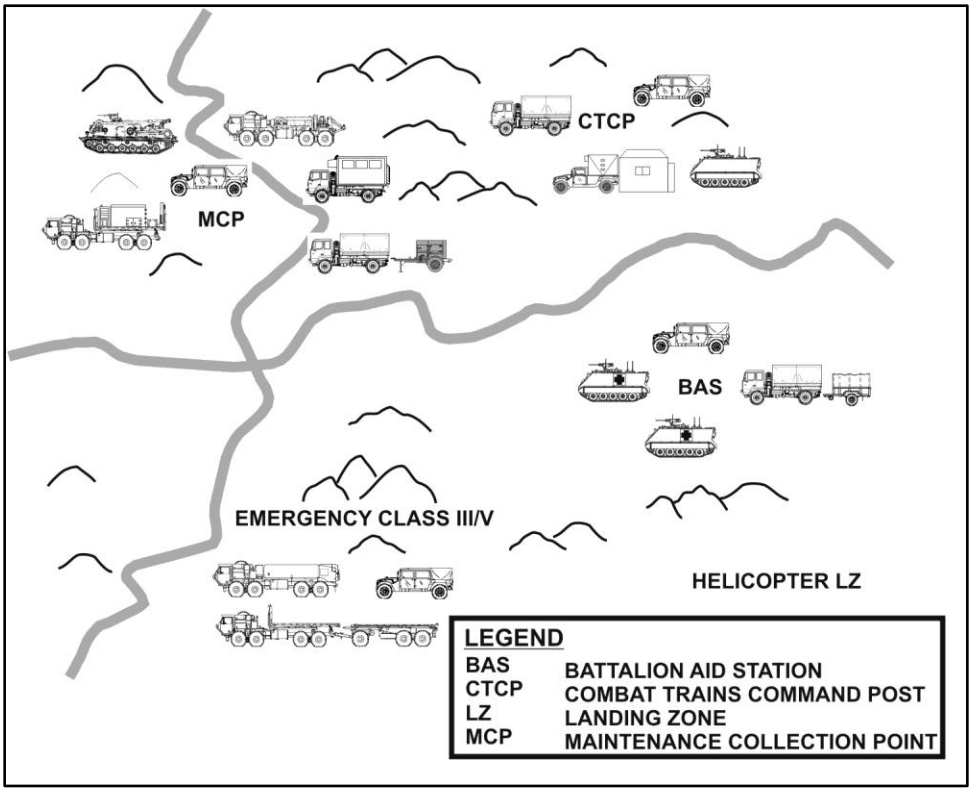

Figure 6-4. Combat trains

Maintenance Collection Point

6-17. The MCP must maintain a current maintenance status on each of the companies' equipment, especially on its vehicles in order to keep the commander apprised of its fighting capabilities. Like any other unit in the CAB it prepares orders, tracks current operations with necessary overlays and provides tactical SOPs. The MCP is usually a very active with personnel and vehicles coming and going for repairs, or resupply. The maintenance team must have a system to account for these personnel and vehicles at all times in order to move on order without losing any control of its assets. Company Trains

6-18. Company trains provide sustainment for a company during combat operations. Company trains usually include the 1SG, medical evacuation teams, supply sergeant, and the armorer. Usually, the FSC

provides a field maintenance team, with capabilities for maintenance, recovery, and limited combat spares. The supply sergeant can collocate in the combat trains, if it facilitates LOGPAC operations. The 1SG usually directs movement and employment of the company trains; although the company commander may assign the responsibility to the company XO. Generally, company trains are located between 500 and 1000 meters away from the company's combat operations. By placing at least one terrain feature between it and the enemy, the company trains will be out of the enemy's direct fire weapons.

SUSTAINMENT-RELATED COMMAND POSTS

6-19. The CAB commander may choose to create a CTCP or a FTCP as a headquarters for administrative and logistics support. The S-4 is typically the OIC of the CTCP. If constituted, the FTCP is usually led by the HHC commander. As an alternative the FSC commander can be in charge of the FTCP and the HHC commander can assume command of the CTCP, depending on personnel experience and expertise. These CPs can be organized to accomplish specific logistical tasks:

- Situations that might dictate the need for a CTCP, which include:
  - The combat trains require a dedicated mission command node.
  - The CAB commander desires a battalion presence with the FSC.
- Situations that might dictate the need for a FTCP, which include:
  - During periods of supply or resupply of major end items.
  - The sustainment elements of the battalion are no longer 100 percent mobile.

6-20. The CTCP generally consists of two S-4/S-1 tactical vehicles, the S-1 medium tactical vehicle, and the FSC's CP carrier and enough personnel cross-trained to ensure continuous operation. The CTCP must stay abreast of the tactical situation and task organization; monitor the CAB command net to identify logistics requirements; and receive requests, reports, and requirements from subordinate elements. Subordinate requirements are analyzed, consolidated, and forwarded to the FSC CP or other supporting activity. The FSC commander coordinates and directs elements to take action to satisfy the forward units' requirements (for example, LOGPACs). Often the FSC will have a representative (for example, company XO) at the CTCP to assist with coordination.

6-21. If organized, the FTCP is the coordination and control center for the S-1's personnel and administration center company supply sections, and FSC. The HHC commander generally focuses on CP operations while the FSC commander commands his company and coordinates all sustainment requirements for the CAB.

6-22. The S-1 section has personnel at both the CTCP and, if organized, the FTCP. The S-1 and his staff in the CTCP primarily perform the critical tasks of strength accountability and casualty reporting as well as command post functions. The S-1 personnel in the FTCP perform replacement operations, administrative services, personnel actions, military pay, and coordinate legal services.

SUSTAINMENT COMMUNICATIONS NETWORKS

6-23. The CTCP is the net control station for the CAB A/L net. The S-4, S-1, HHC commander, FSC commander, FSC platoon leaders, medical platoon leader, company 1SGs, and FTCP operate in the A/L net. The CTCP also operates in the BCT A/L net and in the CAB command net.

6-24. FBCB2 is the primary means of automated communication within the CAB. Unit 1SGs report their personnel losses, maintenance problems, and emergency supply requirements immediately. Supply and personnel status reports are submitted periodically per the unit TACSOP. When use of radio or FBCB2 is not possible, messages are sent with resupply or evacuation vehicles. The CTCP and FTCP maintain control of vehicles moving forward to the LRPs. The CAB TACSOP establishes procedures for resupply without request in the event communications fail.

6-25. The FSC utilizes combat service and support VSAT for sustainment communications external to the CAB (for example, BSB or sustainment brigade). The CAB S-1 also relies on the combat service and support VSAT for eMILPO. When the FSC is not positioned near the CTCP, the S-1 will need to travel to, or collocate with the FSC.

6-26. Operations will require leaders to carefully plan for and rehearse mission command to report combat power, repair part requirements, recovery needs, and other aspects of sustainment. Leaders must have primary, alternate, contingency, and emergency plans to maintain a COP, using both sides of the communications spectrum when the advance digital systems widely being used do not provide operational capability on the move.

6-27. The chart below (see Figure 6-5) represents a primary, alternate, contingency, and emergency communication plan with some of the enablers available at the BCT and CAB level. A well thought out primary, alternate, contingency, and emergency plan will account for the systems that are not feasible for monitoring a decisive actions operation on the move.

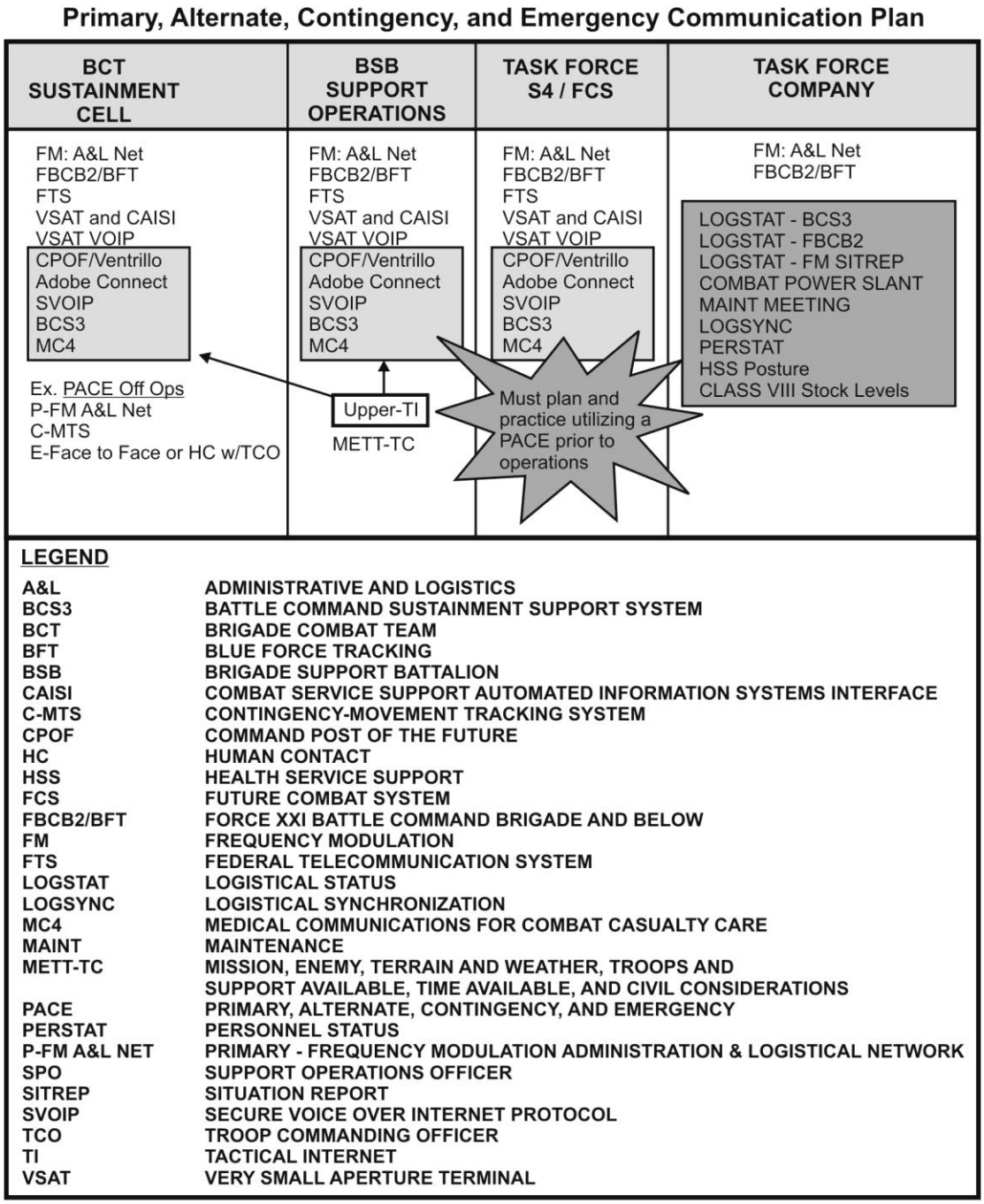

Figure 6-5. Sample primary, alternate, contingency, and emergency communication plan

SECURITY OF THE TRAINS

6-28. Sustainment elements behind the forward line of own troops form base clusters and must be prepared to defend against hostile or insurgent forces that have broken through or bypassed the defense. Generally, the HHC commander is responsible for trains' security when operating in a unit trains configuration. When trains are echeloned, the S-4 is responsible for securing the combat trains, and the HHC commander is responsible for securing the field trains. If the CAB commander locates his field trains with the BSA, the

HHC commander coordinates with the BSB commander to integrate the field trains into the BSA defensive plan.

6-29. The HHC commander and S-4 should consider all the assets at their disposal to increase trains security to include vehicles receiving maintenance that are still capable of firing some or all of their weapon systems, available personnel, to include maintenance and crews and other attachments.

6-30. A perimeter defense is normally planned in all trains areas, and elements in the trains are assigned a specific sector to defend. Mutually supporting positions that dominate likely avenues of approach are selected for vehicles armed with heavy machine guns. Reaction forces and observation posts are established based on the unit TACSOP. To enhance security, an alarm or warning system is arranged. Sector sketches, fire plans, and obstacle plans should be prepared. Rehearsals are conducted to ensure that all personnel know the part they play in the defensive scheme. The OIC at each location establishes a shift schedule for operations and security on a 24 hour basis.

MOVEMENT OF THE TRAINS

6-31. Planning sustainment for decisive actions requires detailed planning and guidance, especially in the offense when forward trains are required to move with the fight to provide the maintenance support and combat power to maintain the momentum of the offensive operation.

6-32. The XO and S-4, in coordination with the FSC commander, plan locations and movement of the trains (or the FSC) to ensure responsive forward support. The displacement of the trains must be carefully coordinated with the concept of operations, locations of the BSA and MSRs, communication links, establishment of digital nodes, priorities of support, and time available for sustainment brigade throughputs and displacement. It is important for the CAB staff to understand the impact of BSB to FSC delivery schedules during the planning process. Movement of the trains or the FSC may severely constrain the maneuver commander's plan unless each echelon of sustainment is considered during the planned or emergency move.

6-33. During decisive actions it is not feasible to assume that all maintenance can be conducted forward with the maneuver companies. Forward maintenance teams are limited on haul capacity to fix forward,. During the planning process, it is imperative to determine when evacuation to the field trains/brigade support area (BSA) is required. A solid trigger for that is an evacuation timeline with conditions that indicate that pushing a piece of equipment to the rear formations is advantageous. This timeline should be established by the Brigade with input from the supporting elements. For example it can determine that repairs requiring up to 2 hours are conducted at company trains, 2-6 hour repairs at the CAB MCP and any repairs requiring greater than 6 hours go to the field trains.

6-34. Resupply by air is an alternative to conducting resupply. Normally resupply is conducted by moving equipment, supplies and personnel around by trains or convoys. The combat trains can establish a helipad for medical evacuation and sling load resupply of repair parts and other needed supplies, as oppose to waiting for convoy resupply to deliver supplies. To do so the S-4 must first carefully consider the road and rail networks, airfields, truck availability, bridges, ports, cargo handlers, petroleum pipelines, materials handling equipment, traffic flow, choke points, and control problems to determine the best methods for resupply. (Refer to FM 4-20.41 for more information.)

6-35. Security of sustainment assets during movement is a major consideration. The CAB, with FSC, has sufficient transportation assets to move its Soldiers and equipment in one move. However, downloaded supplies at supply points and disabled equipment at maintenance sites create mobility problems. The CAB staff must closely monitor mobility status and anticipate mobility problems well in advance to develop solutions. For all additional transportation requirements beyond the CAB's capability, the S-4 must coordinate for external support with the BSB support operations section.

6-36. In addition to conducting planned moves, both the combat trains and the field trains should have a TACSOP for conducting emergency moves. Emergency moves normally occur when the trains must relocate quickly to avoid a significant enemy threat. The CAB designates alternate trains' locations and movement routes. The CTCP, FTCP, and FSC commander disseminate emergency movement plans to all

sustainment elements in accordance with the unit TACSOP. Leaders reconnoiter movement routes and alternate locations to ensure suitability. Emergency plans are rehearsed as time allows.

Movement of Trains Within the CAB Formation

6-37. This technique is used when the likelihood of enemy contact is minimal, sustainment demands are light, and the CAB companies can use basic loads and organic recovery assets to satisfy initial requirements. Combat trains always move with the CAB. The trains are dispersed within march columns and are secured by other elements of the CAB. Sufficient time must be allowed for the FSC to establish interim support from the BSB prior to mission execution. This technique provides timely movement and march security but precludes any meaningful support until movement ceases. This technique may be useful during tactical road marches or approach marches.

Movement of Trains With the BSB

6-38. When BCT operations are conducted in clearly defined phases with identifiable windows between phases (such as in river crossings) the BSB may support the BCT from a BSA that includes the FSCs and then displace as one entity to a subsequent BSA location. This allows the BSB to maximize support from a mature logistical base that facilitates resupply and maintenance activities. This concept also enhances mission command of the BSB and simplifies actions for supported forces since a single point of contact is established for each service and facility of the BSA. However, this movement method may cause gaps in support.

Movement of Trains by Bounds

6-39. Sustainment assets are divided and displaced by successive bounds from one trains location to a new trains location. The FSC commander normally moves with the initial logistics element to ensure rapid setup of the displacing echelon. This technique provides more responsive support by minimizing the throughput distances to FSC elements. It also enhances the survivability of logistical assets by positioning them in different areas. Because of echelonment, mission command of the FSC operations may be degraded. A heavy reliance on unit TACSOPs, communication links, and sustainment plans is vital to ensure smooth displacement of the trains.

LOGISTICS PACKAGE OPERATIONS

6-40. An efficient method of resupply to forward companies is accomplished by LOGPACs. LOGPACs are organized by the FSC commander and assisted by company supply sergeants. LOGPACs are organized for each company and separate unit in the CAB and usually moved forward daily for routine resupply. Special LOGPACs are organized and dispatched as required by the tactical situation and logistical demands.

6-41. The S-4 must plan and coordinate LOGPAC operations to ensure that they fully support the commander's tactical plans. The CAB TACSOP establishes the standard LOGPAC. Normally, a company LOGPAC includes trucks for supplies, POL, Class V as well as vehicles with replacements and requiring repair. (Refer to ATP 3-90.1 for more information.)

6-42. LRP locations are determined by the S-4 based on the tactical situation. They should be well forward and easily located. Normally, two to four LRPs are planned. LRPs, as well as the MSR, combat trains, field trains, and BSA locations are included on the operations overlay, if possible. The CTCP notifies subordinates and the FTCP well in advance which LRP(s) will be used. The LOGPAC convoy arrival time at the LRP and the length of time it remains normally are established by TACSOP. If the tactical situation dictates otherwise, the S-4 must determine the time and notify units accordingly. LOGPACs may be scheduled to arrive shortly after arrival at a BP or intermediate objective. Subordinates must ensure that the resupply vehicles are returned to the LRP as soon as possible so that the vehicles can return to the field trains and begin preparation for the next mission.

6-43. At least one senior representative from the CTCP (S-4, S-1, or senior NCO) should be present at the LRP while it is in effect. His purpose is to meet with the unit 1SGs for coordination of logistical

requirements and to ensure that the LOGPAC release and return takes place efficiently. A brief meeting is normally held immediately before the 1SG picks up his LOGPAC. Coordination may include:

- Changes in logistical requirements reflecting any last-minute task organization.
- Reports on personnel, logistics, and maintenance from the companies.
- Confirmation of receipt of digital logistics situation reports (if FBCB2 equipped).
- First hand updates on the tactical situation and logistical status.

6-44. Resupply of the scout and mortar platoons, the main CP, combat trains, and attached support units must be planned and coordinated. The HHC 1SG coordinates and supervises resupply of these elements. Generally, the HHC 1SG operates out of the combat trains. The platoon sergeant of these elements or senior NCO at a facility must report his requirements to the HHC 1SG or to the CTCP.

6-45. The most desirable method of resupply is to form small LOGPACs for these elements, which the platoon sergeant picks up at the LRP in the same manner as a company 1SG. In some cases, the HHC 1SG delivers the LOGPAC to the main CP, combat trains, and scout and mortar platoons. Attachments can receive resupply at one of these locations or as previously coordinated. Another option is for attachments to be resupplied from a nearby company LOGPAC. The S-4 coordinates this resupply before the LOGPACs are dispatched.

6-46. Resupply operations for the scout platoon pose several unique challenges. Special procedures may be necessary to resupply the scout platoon, to include:

- Resupplying the platoon by having each vehicle individually pull off line and move to a resupply site. This is also known as the service station method. (Refer to ATP 3-90.1 for more information.) This method may be feasible when the platoon is performing security for a stationary force.
- Resupplying the platoon near the combat trains as the platoon repositions between missions. This is also known as the distribution point method.
- Designating one Class III vehicle in the combat trains to fuel the platoon on short notice. This method is also known as the tailgate method.

6-47. While the LOGPACs are the preferred methods of resupply, there will be times when other methods of resupply are required:

- Resupply from the combat trains (emergency resupply). The combat trains have a limited amount of Class III and V for emergency resupply. The S-4 coordinates emergency resupply from the combat trains and then refills or replaces the combat trains' assets.
- Prestocking. Prestocking is the placing and concealing of supplies on the battlefield. This is normally done during defensive operations when supplies are placed in subsequent battle positions. These prestocked supplies are sometimes called a cache.
- Mobile prepositioning. This is similar to prestocking except that the supplies remain on the truck, which is positioned forward on the battlefield.

AERIAL DELIVERY

6-48. The CAB and supporting FSC are 100 percent mobile with their organic vehicles and trailers. Depending on the level of supplies to be stocked, the FSC may not be entirely mobile. If the FSC's limited assets are committed, the FSC requests extra transportation assets from higher headquarters.

6-49. Aerial delivery is also used as a method of resupply. When employing aerial delivery, the ABCT should consider the following:

- The use of aerial delivery requires the coordination of the CAB staff and the ABCT S-3, S-4, and ADAM/BAE sections. Special focus must be placed on the enemy air defense capability.
- The FSC must be prepared to both receive and package bulk supplies by sling-load operations or joint precision airdrop system. To conduct these operations, sling load trained personnel are required in of the FSC's distribution platoon.

6-50. All companies must know how to select LZ/DZ to receive aerial resupply. The delivered supplies are immediately transported away from the LZ/DZ.

SECTION II – MAINTENANCE

6-51. The Army has two levels of maintenance; field and sustainment. Field maintenance consists primarily of troubleshooting, repairing or replacing parts and assemblies on on the user's system or platform. It is the product of merging the previous organizational and direct support levels of maintenance together. Within the CAB, field-level maintainers are concentrated in the FSC. Field maintenance is also done in the battalion S-6 sections for network and signal equipment. Sustainment maintenance consists of repairing components major assemblies off the user's system or platform and overhauling major end-items to the national standard, Sustainment level maintenance returns the products to the national supply system. COMSEC equipment is evacuated through maintenance channels from the unit to the first supporting maintenance unit to complete a total supply transaction and return a serviceable device to the user. The repair of communications security material is performed at sustainment level only.

FIELD MAINTENANCE

6-52. *Field maintenance* is repair and return to user and is generally characterized by on-/near-system maintenance, often utilizing line replaceable unit, component replacement, BDA, repair, and recovery. (ATTP 4-33) It covers tasks previously assigned to operator/crew, organization/unit, and direct support maintenance levels. It includes some off-system maintenance critical to mission readiness.

6-53. Company commanders ensure that vehicle crews and equipment operators perform preventive maintenance checks and services. To provide quick turnaround of maintenance problems, each maneuver company has a field maintenance teams (FMT) from the supporting FSC dedicated to support them. These FMTs have forward repair systems and mechanics trained in the company's equipment. The company 1SG usually positions the FMT in the company trains. (Refer to FM 4-90 for more information.)

6-54. The FSC performs field-level maintenance. The FSC has a maintenance platoon that repairs automotive, armament, ground support, electronic, and missile equipment. The FSC focuses on line replaceable units and component replacements, using combat spares from prescribed load list and shop stock. It has a service and recovery section and also performs battle damage assessment and repair. The FSC's maintenance control section uses standard Army maintenance system-enhanced (SAMS-E) or GCSS-Amry to order repair parts. The FSC commander establishes MCPs in coordination with the maneuver battalion XO or S-4. These MCPs are generally in the combat trains.

6-55. The BSB's field maintenance company provides limited backup support to FSCs,. It also serves as the maintenance point for low density equipment. When required, the BSB dispatches FMTs to perform on-site diagnoses, make minor adjustments, and conduct repairs.

BATTLE DAMAGE ASSESSMENT AND REPAIR

6-56. Battle damage assessment and repair (BDAR) is the procedure used to rapidly return disabled equipment to the operational commander by field expedient repair of components. BDAR restores the minimum essential combat capabilities necessary to support a specific combat mission or to enable the equipment to self- recover. BDAR is accomplished by:

- Bypassing components or safety devices.
- Relocating parts from like or lower priority systems on the equipment.
- Fabricating repair parts.
- Implementing a temporary repair.
- Using substitute fluids, materials or components.

6-57. Based on the unit's standard operating procedures and at the commander's discretion, anyone can perform BDAR depending on the extent of repairs required and METT-TC conditions. The commander decides whether or not to use BDAR instead of standard maintenance procedures. Expedient repairs may or may not return the vehicle to a fully mission-capable status. At the completion of immediate combat operations, qualified maintenance personnel will make repairs to restore the equipment to fully mission-capable 10/20 maintenance standards. The Army Regulation 750-1 is the regulatory guidance for BDAR.

RECOVERY AND EVACUATION

6-58. FSCs are responsible for recovering their own damaged equipment and the equipment of the units they support. If the vehicle is repairable, the company recovers it, and transports it to the MCP, or to the nearest MSR, depending on what is specified in the TACSOP or the OPORD. The use of FBCB2 enables recovery vehicles to identify the exact location of the inoperable piece of equipment. When the decision is made to repair the equipment at the BSA, either recovery or evacuation is used. If FSC recovery assets are overextended, recovery support can be coordinated with the BSA to prevent excessive repair delays. Equipment that cannot be repaired at the BSA usually is evacuated to sustainment brigade units.

CONTROLLED EXCHANGE

6-59. Controlled exchange is the removal of serviceable parts from an item of "not mission capable" equipment to install on another piece of equipment that can be rendered mission capable more quickly or easily. The BCT commander can give battalion commanders the authority to direct controlled exchanges.

RESUPPLY

6-60. The FSC has combat spares or shop stock to support maintenance of vehicles, generators, and other equipment. Combat spares are a combination of on-board spares, shop stock, bench stock, and combat repair stock. Combat spares are issued based on the commander's priority and authorization. The FSC may allocate combat spares to FMTs, depending on the METT-TC. The FMTs replenish combat spares using SAMS-E or GCSS-Army through the FSC. The company supply sergeant and communications personnel also order parts as needed through the FSC

COMMUNICATIONS SECURITY MAINTENANCE

~~6-61.~~ COMSEC equipment is evacuated through maintenance channels from the unit to the first supporting maintenance unit to complete a total supply transaction and return a serviceable device to the user. The repair of communications security material is performed at sustainment level only.

SECTION III – ARMY HEALTH SYSTEM SUPPORT

6-62. The Army HSS is arranged in progressive numeric "roles" of medical care. These roles begin at the point of injury with "Role 1" emergency services, and progress to the CONUS support-base. Each role reflects an increase in capability, with the functions of each lower role being within the capabilities of the higher role.

6-63. Role 1 and 2 care is described below. Role 3 medical care is provided by combat support hospitals located in the AO. Role 4 medical care is the CONUS support base for health care. Role 4 medical care is found in support base hospitals. Mobilization requires expansion of military hospital capacities and the inclusion of Department of Veterans Affairs and civilian hospital beds in the National Disaster Medical System to meet the increased demands created by the evacuation of patients from the AO. The support-base hospitals represent the most definitive medical care available within the AHS.

ROLE 1 MEDICAL SUPPORT

6-64. The first medical care a Soldier receives occurs at Role 1. Combat medics, assisted by self-aid, buddy aid, and combat lifesavers provide Role 1 services. It continues at the BAS with treatment from the physician and physician assistant. Role 1 care includes combat and operational stress control services, immediate lifesaving measures, patient collection, and medical evacuation to supported medical treatment elements.

COMBAT LIFESAVERS

6-65. The CLS is a nonmedical Soldier trained to provide enhanced first aid and lifesaving procedures beyond the level of self aid or buddy aid. The CLS is not intended to take the place of medical personnel,

but to slow deterioration of a wounded Soldier's condition until medical personnel arrive. Each squad, crew, or equivalent-sized deployable unit has at least one Soldier trained and certified as a CLS.

6-66. CLSs and buddy aid are crucial to HSS. The CLS is usually the first person on the scene of a medical emergency, and provides enhanced first aid to wounded and injured personnel. The vehicle commander is responsible for ensuring that injured crewmen receive immediate first aid, and that the commander is informed of casualties. He coordinates with the 1SG and company senior medic for ground evacuation.

BATTALION MEDICAL PLATOON

6-67. The BN medical platoon is the focal point of HSS/FHP for the CAB. It is organized to support the BN CPs and companies; acquire, treat, evacuate casualties; and coordinate further evacuation as necessary. This platoon establishes a treatment point at the BAS. The medical platoon provides trained personnel to stabilize patients for further evacuation, provide emergency lifesaving and limb-saving treatment, and treat minor wounds or illness for return to duty. (Refer to FM 4-02.4 for more information.)

6-68. Resupply of medical supplies is through medical channels. Medical personnel are responsible for maintaining their medical equipment sets. Combat lifesavers and company or platoon medics receive replenishment for their aid bags from the battalion medical platoon. To prevent unnecessary depletion of blankets, litters, splints, and other medical equipment, the receiving medical facility exchanges similar properties with the BAS when it accompanies the patient. (Refer to FM 4-02.1 for more information.)

MEDICAL EVACUATION

6-69. Evacuation of injured Soldiers is categorized into two types:

- Medical evacuation is the use of ground or air ambulances to evacuate from the point of injury to a MTF while providing en route care.
- CASEVAC is the use of non-medical vehicles or other means for patient movement without providing en-route care.

6-70. The medical evacuation plan is the key to the HSS plan. The battalion medical platoon is responsible for medical evacuation of casualties from the point of injury to the BAS. The CAB S-1/S-4 must ensure there is a coordinated medical evacuation plan from all BN locations to the BAS, and to the BSMC in the BSA. The BCT surgeon section coordinates the medical evacuation plans of all BCT medical platoons and the BSMC. The CAB S-4 and the ABCT S-4 coordinate AXP locations, and post them on the support graphics in FBCB2. The CAB S-4 also coordinates any available non-standard ambulance support from within the battalion. He identifies and positions internal vehicles as required for mass CASEVAC. The CAB S-4 tracks active and inactive AXPs, and disseminates that information to battalion CPs and companies.

6-71. CAB medical platoons generally attach ground ambulances to companies in anticipation of casualties. The BSMC ambulance teams evacuate patients from the BAS back to the BSMC MTF located in the BSA. Prepositioning BSMC ambulance teams with the supported CAB's BAS reduces ambulance turnaround times. The BCT surgeon, in coordination with the BAE and the BCT S-4, plans the landing sites for aerial evacuation. BCT medical evacuation plans and exercises should include the use of aerial evacuation (when available) to transport litter-urgent patients.

6-72. As casualties occur, the CAB S-4 directs assets to assist with CASEVAC. Medical evacuation outside the BN can be accomplished by ground or air means. Recovery responsibility does not end until casualties are evacuated back to its Role 1 MTF/BAS. Responsibility for further evacuation from the BAS is the mission of the BSMC ground ambulances or supporting air ambulance. Casualties can be evacuated to the BSMC Role 2 MTF in the BSA or other supporting MTFs. Medical patients are evacuated no further to the rear than their condition requires, and return to duty as soon as possible.

6-73. The preferred method of medical evacuation is by air ambulance, but air ambulance use is METT-TC dependent. The aviation brigade may position a forward support medical evacuation team (FSMT) usually consisting of three UH-60 Blackhawk aircraft in support of the BCT. The FSMT is normally located in the BSA or with other aviation elements located in the brigade AO. The FSMT provides area support to the BCT and other units operating in the BCT AO. The BAE and BCT surgeon coordinate the use and

positioning of the FSMT. They integrate air ambulance support to include coordination of AC2 requirements, establishing clear lines of authority to launch a medical evacuation, and identification of PZ and LZs.

6-74. Planners must anticipate the potential for high casualty rates and long evacuation distances. They identify and coordinate AXPs along the axis of advance and on the objective. Planners must identify the AXP locations for all phases of the operation; they must also identify triggers developed for AXPs displacement to their next locations. Planners must retain the flexibility to shift nonstandard evacuation assets to support mass casualty or CASEVAC as required.

MEDICAL REPORTING

6-75. MC4 and TMIP support the information management requirements for CAB medical platoon. The CTCP uses FBCB2 and MC4-TMIP to support medical planning, coordination of orders and subordinate tasks, and to monitor and ensure execution throughout the mission. Medical reporting includes: disease and non-battle injury reports; environmental and occupational health surveillance; and lost duty days.

6-76. The MC4-TMIP is an automated system, which links health care providers and medical support providers, at all roles of care, with integrated medical information. The MC4-TMIP receives, stores, processes, transmits, and reports medical mission command, medical surveillance, casualty movement/ tracking, medical treatment, medical situational awareness, and MEDLOG data across all roles of care. MC4 is capable of using the same combat service and support VSAT network for data transmission as the automated supply and maintenance systems.

ROLE 2 MEDICAL SUPPORT

6-77. Medical companies provide Role 2 care. They examine and evaluate the casualty's wounds and general status to determine treatment and evacuation priorities. Role 2 care can duplicate Role 1, but Role 2 also provides expanded services to the casualty. When required to provide far-forward surgical intervention, a forward surgical team may augment the medical company to provide initial wound surgery.

BRIGADE SUPPORT MEDICAL COMPANY

6-78. CAB Soldiers do not usually use host-nation or other non-U.S. medical facilities except for emergency medical treatment or for medical/surgical specialty consultation when a medical specialist, such as a neurosurgeon, is not readily available. The BSMC examines and evaluates a casualty's wounds and general physical condition to determine treatment and evacuation priorities. This role of care contains Role 1 capabilities, and expands to Role 2 care with the following available services by adding operational dental, laboratory, radiology, Preventive Medicine (PVNTMED), MEDLOG and blood management, combat and operational stress control, and patient holding capabilities. A forward surgical team may augment the BSMC as necessary to provide surgical resuscitation, stabilization, and initial wound surgery. The BSMC has a Brigade Medical Supply Office that serves as a forward distribution point for Class VIII and synchronizes MEDLOG support for medical equipment and its maintenance within the BCT. (Refer to FM 4-90 and FM 4-02 for more information.)

FORCE HEALTH PROTECTION

6-79. *Force health protection* encompasses measures to promote, improve, conserve or restore the mental or physical well-being of Soldiers. These measures enable a healthy and fit force, prevent injury and illness, and protect the force from health hazards. These measures also include the prevention aspects of a number of Army Medical Department functions (preventive medicine, including medical surveillance and occupational and environmental health surveillance; veterinary services, including the food inspection and animal care missions; combat and operational stress control; dental services (preventive dentistry); and laboratory services [area medical laboratory support]. (Refer to FM 4-02 and ADRP 3-37 for more information.)

PREVENTIVE MEDICINE PERSONNEL AND SERVICES

6-80. Preventive medicine support is provided by preventive medicine personnel who are organic to the BSMC. Preventive medicine personnel who are organic to the BSMC provide preventive medicine support. This BSMC preventive medicine section is equipped to conduct preventive medicine surveillance and control. Level II operational tasks include, but are not limited to:

- Preparing a running estimate to identify the health threat in the BCTs AO. Preparations should include acquiring past after-action reports and data from higher headquarters, U.S. Army Public Health Command, and the National Center for Medical Intelligence.
- Advising the commander on impacts of the health threat to his forces and providing recommended techniques and procedures to defeat/minimize the health threat.
- Preparing essential PVNTMED information for inclusion into the operation plan, operation order, and briefings to ensure awareness of both the health threat and the corresponding PVNTMED measures.
- Performing sanitary inspections of supported units' food service, field site, latrine, bathing, and other sanitation facilities.
- Performing sanitary inspections and providing PVNTMED recommendations for detainee facilities. For additional information on medical support to detainee operations, refer to Field Manual Interim (FMI) ATP 4-02.46 (will replace 4-02.46 when revision is released).
- Providing early warning of any breakdown in basic sanitation practices so that corrective action may be conducted before diseases are transmitted.
- Providing early detection and warning of potential disease epidemics or suspected biological warfare agent employment within the BCT AO.
- Providing limited pest management services and vector surveillance to supported units.
- Monitoring field water supplies, to include possible CBRN and toxic industrial material contamination.
- Collecting environmental samples from suspected CBRN- or toxic industrial material-contaminated sources.
- Preparing samples for submission to supporting laboratories for analysis.
- Providing input and recommendations to contracting services to ensure PVNTMED requirements are adequately addressed.
- Preparing chain of custody documents and ensuring that the samples are not contaminated from 39 sources outside the sampled site.
- Providing staff oversight of and assisting in the training in the proper use of PVNTMED measures

COMBAT AND OPERATIONAL STRESS CONTROL

6-81. Provides direct support combat and operational stress control prevention and treatment services for brigade combat team MH sections, division/corps and theater army, and joint or combined forces on an area basis. Combat and operational and stress control prevents, identifies, and manages adverse Combat and Operational Stress Reactions (COSR) in supported units. Combat and operational stress control optimizes mission performance, conserves the fighting strength, and prevents or minimizes adverse effects of COSR on Soldiers and their physical, psychological, intellectual, and social health. Its goal is to return Soldiers to duty expeditiously. Combat and operational stress control activities include routine screening of individuals when recruited; continued surveillance throughout military service, especially before, during, and after deployment; and continual assessment and consultation with medical and other personnel from garrison to the battlefield. (Refer to FM 6-22.5 for more information.)

CAB FORCE HEALTH PROTECTION PROGRAM

6-82. The CAB commander and all leaders, in conjunction with the company commanders, combat medic, and field sanitation teams, emphasize and enforce high standards of health and hygiene at all times. A proactive FHP program implemented at the battalion and company levels should include personal health

and hygiene, preventive medicine, preventive dentistry, combat and operational stress control, food safety, and awareness of potential health threats. CAB leaders and members must be informed on preventive medicine measures to counter health threats and to maintain their health and overall fitness to perform their mission.

SECTION IV – HUMAN RESOURCES SUPPORT

6-83. The S-1 section provides the CAB with an organic element for the planning, integration, coordination, and delivery of human resources (HR) support for the CAB. (Refer to ATTP 1-0.1for more information.) The S-1 provides HR support in the following areas:

- Essential personnel services.
- HR planning and staff operations.
- Postal operations.
- Personnel information management.
- Personnel readiness management.
- Personnel accountability and strength reporting (PASR).
- Casualty operations.

ESSENTIAL PERSONNEL SERVICES

6-84. The CAB S-1 section performs essential personnel services to provide timely and accurate personnel services that efficiently update Soldier status, readiness, and quality of life and allow Army leadership to effectively manage the force. Essential personnel services include: processing awards and decorations, evaluations, transfers, leaves and passes, managing promotions (to include semi-centralized NCO promotions), personnel actions (requests for special training, education, congressional and special inquiries, and reclassification) creating identification cards and tags, processing line of duty investigations and military medical review boards for the Soldiers assigned and attached to the CAB.

HUMAN RESOURCES PLANNING AND STAFF OPERATIONS

6-85. Human resources planning and operations are the means by which the CAB envisions a desired human resources end state in support of the commander's mission requirements. The S-1 tracks current and near-term (future) execution of the planned human resources support to ensure effective support. The S-1, as a coordinating staff officer, integrates continuous human resources planning into the CAB's decision-making process. Human resources planning information includes:

- Task organization.
- Projected changes to task organization during conduct of the operation (for example, by phase).
- Updated unit strength data.
- Projected unit strength data during the operation.
- Updated loss projections (casualty estimates).
- Key position shortages and loss predictions.
- Replacement policies, availability, and flow.
- Theater evacuation policy.
- Manning priorities (priority of fill).
- Crew/key leader reconstitution planning.
- Casualty reporting scheme.
- Location of medical facilities and evacuation assets.
- Location of casualty liaison teams.
- R&R and leave policy and projections during the operation.
- PASR reporting means during the operation and timings.
- Wartime theater awards policy (as impacted by task organization).
- Location of supporting human resources organizations.

- Location and amount of secure/non-secure connectivity and bandwidth.

POSTAL OPERATIONS

6-86. The CAB S-1 section is responsible for the development and coordination of the CAB postal operations plan. The S-1 coordinates external postal support with the BCT S-1 and the human resources company (postal). Normally, Soldier mail will arrive at the BSA already sorted by unit (for example, 4-digit zip code extensions). Then the mail either is picked up by the designated battalion mail clerk, or is sent forward to him in the combat trains. Outgoing mail is exchanged at the same time. The battalion mail clerk receives and distributes the mail to the company mail clerk who ensures it is delivered to the Soldier.

PERSONNEL INFORMATION MANAGEMENT

6-87. PIM collects, processes, stores, displays, and disseminates critical Soldier information. It supports the execution of all other human resources functions. Human resources systems facilitate the rapid, self-service access of Soldier data, and when properly integrated to other human resources systems, facilitates near real-time data updates. However, the CAB S-1 section will still need to perform data inputs to human resources systems. Effective PIM is critical to enable timely PRM which maintains unit personnel combat power. The CAB S-1 exercises PIM through:

- Updating strength-related information in automated databases.
- Managing personnel information on assigned/attached personnel.
- Maintaining personnel files in accordance with regulations and policies.

PERSONNEL READINESS MANAGEMENT

6-88. PRM distributes Soldiers to CAB units based on documented authorizations, commanders' priorities, and anticipated mission needs; thus providing the manpower needed to support CAB operations. Several significant manning processes encompass PRM, such as individual Soldier readiness (in terms of deployability), strength management and strength distribution, and replacement operations. CAB S-1 responsibilities for PRM include:

- Monitor and report personnel readiness status of subordinate units (to include key leaders, combat squads, and teams).
- Predict personnel requirements based on current strength levels, projected gains, estimated losses and number of individuals returning to duty from medical facilities.
- Synchronize replacement flow with equipment.
- Advise the CAB commander on current and projected personnel readiness status.

PERSONNEL ACCOUNTABILITY AND STRENGTH REPORTING

6-89. PASR is the process used to provide personnel strength information critical to commanders, human resource providers and the PRM system. Personnel accounting is the process of recording by-name data on Soldiers when they arrive, depart, change duty location, or change duty status. Strength reporting is the numerical end product of the by-name accounting process. Company 1SGs are critical participants in this process. The S-1 section must be very sensitive to the accuracy and timeliness of all personnel accounting reports, paying special attention to Soldiers who have changed status in the medical treatment process and task organization changes. Timely data input through eMILPO and DTAS is the method for reporting shortages. CAB S-1 PASR responsibilities include:

- Collect, summarize, analyze, update and report by-name personnel strength information using the directed secure or non-secure HR enabling systems (duty status changes).
- Maintain personnel information via DTAS and eMILPO.
- Reconcile manual strength information with automated strength information systems.
- Submit personnel status reports to BCT S-1.
- Coordinate with appropriate agencies for information on casualties, patient tracking, and stragglers.
- Coordinate for connectivity for secure and non-secure voice and data systems.

- Ensure S-1 section members have appropriate security clearances and access to the appropriate human resource systems.

CASUALTY OPERATIONS

6-90. Casualty operations includes the production, dissemination, coordination, validation and synchronization of casualty reporting, casualty notification, casualty assistance, line-of-duty determination, disposition of remains, disposition of personal effects, military burial honors and casualty mail coordination.

Unit Reporting

6-91. As casualties occur, the nearest observer informs the company 1SG via the most expedient method available (for example, free text within FBCB2, FM voice) per unit TACSOP. The 1SG uses the FBCB2 to submit a personnel situation report, which documents duty status changes on all casualties. FBCB2 sends these reports directly to the CTCP. Casualties are taken to casualty collection points for classification of injury type (routine, urgent, return to duty), evacuation, and integration into the medical treatment system. The 1SG ensures completed DA Form 1156 (*Casualty Feeder Card)* are forwarded to the CAB S-1, who then enters the data into the Defense Casualty Information Processing System. The report is then transmitted to BCT S-1, who verifies the information and forwards the report to the Corps and Division G-1/AG, or deployed theater Casualty Assistance Center.

6-92. The S-1 ensures the accuracy of the data in defense casualty information processing system to, in turn; ensure accurate and timely notification of the Soldier's next of kin. The CAB S-1 must establish procedures to ensure that attachments and augmentations to the battalion are accurately reported, and that each Soldier is reported at least, but not more than, once.

6-93. Commanders and their 1SGs must establish procedures to ensure that the Soldier's next of kin are notified properly and according to procedure. The proliferation of personal communications (for example, cell phones and computers) in proximity to the battlefield enables nearly every Soldier to contact his/her home station. The next of kin for Soldiers wounded or killed in action should not receive notification through unofficial means.

Medical/Personnel Accounting

6-94. When a Soldier becomes a casualty, the unit medic from the medical platoon records medical treatment on the Soldier's DD Form 1380 (*United States Field Medical Card)*. The BAS and BSMC read the Soldier's DD 1380 when they treat the Soldier. The CAB S-1 should electronically receive a notification message to update the Soldier's patient tracking status. In this manner, a casualty's location can be determined and Soldiers properly accounted for. If the electronic system does not work, the S-1 should plan to have a representative at the BAS. (Refer to FM 4-02.17 for addition reporting requirements.)

S-1 Responsibilities

6-95. Key casualty operations responsibilities of the CAB S-1 section include:

- Maintain personnel asset visibility on all assigned or attached personnel.
- Provide Soldiers the opportunity to make changes to their DD Form 93 (*Record of Emergency Data)* and DD Form 8286 (*Serviceman's Group Life Insurance*) when changes are necessary and ensure both are current and uploaded into iPERMS.
- Ensure that all assigned or attached personnel are trained on and maintain required copies of DA Form 1156.
- Receive casualty information from subordinate or attached units (information may be received via casualty reporting system, DA Form 1156s, radio, or by other available methods).
- Notify the battalion commander and the chaplain when a casualty occurs.
- Ensure a field grade officer from the CAB reviews and approves all casualty information prior to submission of the initial report. (If the tactical situation does not allow a review, follow-up the initial report with a supplemental update as soon as possible.)

- Submit initial casualty reports to BCT S-1 using DA Form 1156 or defense casualty information processing system -FWD within three hours of casualty notification when conditions permit.
- Provide supplemental casualty report information.
- Process posthumous promotions, awards, U.S. citizenship actions, if applicable.
- Appoint summary court-martial officer for personal effects.
- Coordinate for an investigating officer to conduct an AR 15-6 collateral investigation (required for hostile deaths and accidental or operational nonhostile and hostile friendly fire incident).
- Appoint line of duty investigating officer for nonhostile injuries and deaths, as directed by the commander.
- Prepare, review and dispatch letters of sympathy or condolence.
- Coordinate with the surgeon, battalion aid station, or medical company to monitor status of patients.
- Track evacuated casualties back to home station/demobilization site.
- Update the commander on the status of casualties.

6-96. Techniques for casualty management include:

- Plan to receive reports from company 1SGs thirty minutes after casualties occur.
- Plan to forward reports to the BCT S-1 within one hour after casualties occur.
- Monitor mortuary affairs activities and reconcile casualty reports.
- Plan to prepare Purple Heart recommendations, letters of condolence, and posthumous awards.
- Coordinate with BAS, BSMC, and casualty liaison teams to monitor status of casualties.
- Coordinate requirements with the S-4 for mortuary affairs supplies for unit teams.
- Coordinate with the BSMC and casualty liaison teams for return to duty of battalion personnel.

RELIGIOUS SUPPORT

6-97. Commanders provide opportunities for the free exercise of religion through their chaplains and chaplain assistants. The unit ministry teams (UMTs) provide religious support by executing specific functions. Commanders expect chaplains and chaplain assistants to understand the tasks associated with these functions. A partial, descriptive list of the religious support functions a UMT may use to accomplish the operational religious support mission includes:

- Advising the command on religion, morals, morale, and ethical issues.
- Leadership of religious worship.
- Administration of religious rites, sacraments, and ordinances.
- Provision of pastoral care and counseling.
- Teaching and management of religious education.
- Provision of professional support to the command and staff.
- Liaison with local or host-nation religious leaders as directed by the commander.
- Conduct of religious support planning, training, and operations.

6-98. The chaplain advises the commander on the impact of religion within the unit and how religion impacts the unit's mission throughout its area of operations. Internally, the chaplain is responsible for advising the command on the religious practices of Soldiers within the command. This can include identifying holy days, specific worship requirements, dietary requirements, and wearing of religious garments. Externally, the chaplain advises the command on the specifics of the religious environment within their area of operations that may impact mission accomplishment. This can include indigenous religions in the area of operations, holy days that could impact military operations, and the significance of local religious leaders and structures. The UMT can work within boards, bureaus, centers, cells, and working groups to integrate their respective expertise and knowledge with the collective expertise of the staff in order to focus on specific problem sets to provide coherent staff recommendations to the commander. (Refer to FM 1-05 and the ATP 1-05 series for more information.)

LEGAL SUPPORT

6-99. The CAB S-1 has an assigned paralegal specialist (27D). Under the technical supervision of the BLS judge advocate, the paralegal specialist assists with the delivery of the six core legal disciplines to the commander: military justice, international and operational law, administrative and civil law, contract and fiscal law, legal assistance, and claims. The paralegal specialist's duties include serving as a liaison between the CAB and the BLS, preparing legal and administrative documents under the supervision of a judge advocate, assisting with investigations as directed by the BLS, and tracking all unit legal actions.

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Chapter 7

Enabling Tasks and Activities

"Every Soldier must know, before he goes into battle, how the little battle he is to fight fits into the larger picture, and how the success of his fighting will influence the battle as a whole."

Field Marshal Bernard Montgomery

Enabling tasks are specialized missions that units plan and conduct to achieve or sustain a tactical advantage. Units execute these operations as part of offense, defense, or stability tasks. The fluid nature of the modern battlefield increases the frequency with which the CAB enabling tasks and activities, which include, tactical road march, site exploitation, linkup, passage of lines, relief in place, battle handover, gap crossing, assembly area operations and breaching operations. This chapter establishes techniques and procedures unique to the CAB that the battalion can apply to these specialized tasks.

SECTION I – ASSEMBLY AREA OPERATIONS

7-1. An assembly area is a location where a force prepares or regroups for further action. While in assembly areas, units execute the organization, maintenance, resupply, and personnel actions necessary to maintain the combat power of the force.

ASSEMBLY AREA TASKS

7-2. Certain tasks are associated with planning, occupying, and operating an assembly area, largely as a matter of TACSOP. The circumstances in which the assembly area is occupied dictate to what extent these tasks are performed. Assembly area tasks include:

- Site selection.
- Quartering party.
- Occupation.
- Security.
- Departure.

SITE SELECTION

7-3. Although assembly areas are generally secure from enemy interference, commanders must consider the possibility of enemy attacks or observation. Assembly areas should provide the following:

- Concealment from air and ground observation.
- Cover from direct fire.
- Terrain masking of electromagnetic signal signature.
- Sufficient area for the dispersion of subunits and their vehicles consistent with the enemy and friendly tactical situation.
- Areas for unit trains, maintenance operations, and command posts.
- Suitable entrances, exits, and internal routes. (Optimally, at least one all-weather paved surface road transits the assembly area and connects to the MSR in use.)
- Terrain allowing the observation of ground and air avenues of approach into the assembly area.
- Good drainage and soil conditions that support unit vehicle movement.

QUARTERING PARTY

7-4. Quartering parties have four responsibilities: conducting reconnaissance (if reconnaissance parties are not used), securing the area, organizing the area, and guiding arriving units. During tactical unit movement, the reconnaissance party can perform area reconnaissance as a follow-on mission.

7-5. An area reconnaissance is performed to determine suitability of the area. The quartering party also provides initial security of the area until the main body arrives. Aerial reconnaissance (that is UAS) can help the quartering party secure the assembly area by conducting screening missions and surveillance of possible threat avenues of approach. Organizing the area includes selecting and marking unit and vehicle positions, improving and marking routes, and marking or removing obstacles. Guide duties include meeting units at the release point and leading them to positions.

OCCUPATION

7-6. As units arrive, guides move them, without stopping, to unit locations and vehicle positions. Organization of the area based on the unit order of march prevents congestion at the release point. Once in position, units and vehicles make adjustments. Positioning considerations are as follows:

- Locations selected to afford dispersion and hide positions.
- Vehicles oriented/positioned to facilitate defense.
- CPs and trains centrally located for security, ease of support, and road access.
- Mortars sited to provide fire support.
- Communications by wire or messenger established within companies and with the battalion.

Battalion Assembly Area vs. Individual Company Assembly Areas

7-7. The CAB may assign AOs to subordinate companies and require them to tie in their fires and observation with each other. The main CP, trains, and mortar platoon are located near the center of the assembly area. Ideally, company sectors are assigned to balance the task organization against the appropriate enemy avenue of approach. The scout platoon occupies observation posts at key points around the entire perimeter of the battalion or screens along the most dangerous or likely avenue of approach. This method configures the CAB in a perimeter defense with companies oriented outward. This is the most common organization of battalion assembly areas.

Individual Company Assembly Areas in Battalion Area of Operations

7-8. The CAB may assign separate individual assembly areas to subordinate companies, which establish their own 360-degree security. Areas between companies are secured through surveillance and patrolling. The main CP, trains, and mortar platoon establish positions central to outlying companies. The battalion usually establishes echelons of trains by locating the field trains with the FSC and positioning the combat trains centrally within the AO.

SECURITY

7-9. An assembly area is not designated as a defensive position, but the CAB or company organizes it so that a threat ground attack could be detected and defeated. Security against air attack is best provided by passive measures designed to conceal the unit from detection. Additional security considerations include the following:

- Guards at all entrances and exits control the flow of traffic.
- Observation posts cover key terrain features and likely avenues of approach.
- Platoons prepare fire plans and coordinate on the flanks.
- Fire support plans are prepared by the FIST and FC.
- Patrols, sensors, and surveillance devices augment security.
- Contact points for units assist in coordination.
- Roads are the specific responsibility of subordinate units.

- Movement is confined to roads to preclude needless surface disruption that could leave a visible aerial indicator.
- Unnecessary vehicle movement is restricted.
- Minimal use of radios reduces electronic signature.
- Noise and light discipline is strictly enforced.
- The readiness condition level is established and adjusted based on METT-TC.
- Units must consider the location and activities of other units within the AO and coordinate with those assets for mutual security.

DEPARTURE

7-10. Departing the assembly area is the first step of a mission and is just as important as the mission itself is. A progressive system of increasing readiness ensures that units are ready to move when required without needlessly tiring Soldiers and wasting fuel during long waits. The assembly area is occupied with the follow-on mission in mind to preclude congestion on departure. Routes from subordinate unit locations are reconnoitered and timed. Subordinate units designate a linkup point, and units move to and through that point based on their reconnaissance. Depending on threat capabilities, departure may be conducted under radio listening silence.

SECTION II – TACTICAL ROAD MARCH

7-11. A *tactical road march* is a rapid movement used to relocate units in a combat zone to prepare for combat operations. (ARDP 3-90) Tactical road marches must have a synchronized plan incorporating all warfighting functions. This movement must be planned for as if it were an offensive operation. Although hostile contact is not anticipated, the unit must maintain security measures and be prepared to react to enemy contact. At battalion level and higher, the S-3 is responsible for planning tactical road marches; while the S-4 generally plans administrative moves.

ORGANIZATION OF FORCES

7-12. The CAB organizes into march columns to conduct movement. A march column includes all elements of a force using the same route for a single movement under the control of a single commander. Whenever possible, a unit marches in multiple columns over multiple routes to reduce closing time. A large column may be composed of a number of subdivisions, each under the control of a subordinate commander. March columns are composed of four elements: reconnaissance party, quartering party, main body, trail party.

SECTION III – LINKUP

7-13. A linkup is a meeting of friendly ground forces, which occurs in a variety of circumstances. A linkup will usually require a passage of lines. Linkup can occur when two or more friendly forces—

- Complete the encirclement of an enemy force.
- Assist breakout of an encircled friendly force.
- Join an attacking force with a force operating in the enemy's rear area.
- Make contact with other forces on a noncontiguous battlefield.

TYPES OF LINKUP

7-14. There are two linkup methods, the first of which involves the linkup of a moving force with a stationary force. Under these circumstances the moving force usually has linkup points near the restrictive firing line (RFL), or LOA, near the stationary forces security elements. The other method occurs when two there are two moving forces. This is usually an indicator of a fluid operation, which requires the detailed coordination and effective communication to avoid fratricide.

LINKUP OF A MOVING FORCE WITH A STATIONARY FORCE

7-15. To ensure the friendly forces join without engaging one another, the commander of the linkup force designates the linkup points. These linkup points are at locations where the axis of advance of the linkup force intersects the security elements of the stationary force. These points must be readily recognizable to both forces and should be posted on both digital overlays and conventional maps in case of digital communications loss. Alternate points are chosen so the units are prepared in case enemy activities cause linkup at places other than those planned. The number of linkup points selected depends on the terrain and number of routes used by the linkup force.

7-16. The S-6 section is critical to linkup operations. Digital communications are used to transmit and share combat information data. However, use of digital means depends on METT-TC factors and the ability to maintain digital linkages between the moving unit and stationary unit.

7-17. To facilitate a rapid passage of lines and to avoid inadvertent engagement of friendly forces, personnel in the linkup force must be thoroughly familiar with recognition signals and plans. As required, stationary forces assist in the linkup by opening lanes in minefields, breaching or removing selected obstacles, furnishing guides, providing routes with checkpoints, and designating assembly areas.

7-18. When linking up with an encircled force, the CAB carries as much supply material as possible during the linkup operation. This material includes Class I, III, V, and VIII. If an enemy force has encircled the stationary force, the battalion carries additional supplies and material requested through to the BCT S-4 before the linkup takes place. The CAB S-4 ensures that each company has received the FBCB2 sustainment overlay depicting MSRs, traffic control points, AXPs, and MCPs.

LINKUP OF TWO MOVING UNITS

7-19. Linkup between two moving units is one of the most difficult operations. It is usually conducted to complete the encirclement of an enemy force. Primary and alternate linkup points for two moving forces are established on boundaries where the two forces are expected to converge. As linking units move closer, positive control is coordinated to ensure they avoid firing on one another and to ensure the enemy does not escape between the two forces. Again, using digital systems facilitates planning, synchronization, execution, and fratricide avoidance. However, digital architecture limitations may mandate that analog procedures be the primary method of coordination.

PLANNING A LINKUP OPERATION

7-20. The linkup is a complex operation requiring detailed planning and coordination. Plans for a linkup are coordinated as far in advance as possible. The two forces carefully define and coordinate their schemes of maneuver with attention given to graphic control measures, communications, and the subsequent mission to be performed by each force after linkup operations are completed. Alternate linkup points are planned and lend flexibility to the overall operation.

7-21. Before commencing a linkup operation, the headquarters elements of the stationary force and linkup force must share data including COMSEC procedures and digital graphic overlays consisting of the following:

- Primary and alternate linkup points.
- Checkpoints and waypoints information.
- Unit disposition and activity (friendly and enemy).
- Locations and types of obstacles.
- Fire control measures and FSCMs, including RFLs.

7-22. The two units establish liaison during planning and continue it throughout the operation. Liaison parties must have the capability to communicate digitally with their parent unit. As the distance closes between the forces, the requirement to track movement through FBCB2 and maintain close liaison increases. Use of Army aircraft can improve and expedite this process.

7-23. Linkup operations frequently require a passage of lines. Once through friendly lines, the CAB moves out as in an exploitation to affect the linkup. Speed, aggressive action, and boldness characterize this action. If possible, the linkup force avoids enemy interference with its mission and concentrates its efforts on completing the linkup. If enemy forces threaten the successful accomplishment of the mission, they are either destroyed or bypassed and reported.

7-24. The BCT headquarters directing the linkup operation must establish command relationships and responsibilities for the forces involved. Both the linkup force and the force with which linkup is to be made should remain under the control of the directing headquarters. Operational plans must prescribe the primary and alternate day and night identification and recognition procedures, vehicle systems, and manmade materials used to identify friend from enemy.

7-25. When the BCT directs a linkup operation, it usually establishes an RFL for both battalions to ensure positive control and reduce the risk of fratricide. It transmits these RFLs to both units by way of a digital overlay, and they are subsequently adjusted and overlays updated as one force moves toward the other. This process continues until a single RFL is established between the forces. Usually, this is the point on the ground where the two forces plan to establish contact.

COMMUNICATIONS DURING LINKUP OPERATIONS

7-26. The stationary and linkup force must maintain positive control during linkup operations to prevent inadvertent fratricidal engagements. They use FBCB2, ABCS, and FM voice systems as required to share combat information and to positively identify friend from foe. It is imperative that both the linkup and stationary units conduct precombat communications checks before the operation begins to ensure that connectivity and interoperability between digital systems are established and maintained.

7-27. The S-6s of the two linkup units are integral to successful linkup operations when both units are digitally equipped. These officers must ensure that units address both primary and alternate forms of communications during planning, and that they synchronize both manual and digital systems used in support of the linkup operation, and integrate these into the linkup plan.

7-28. The CAB S-6 has special requirements related to digital operations. The following are examples:

- Exchange of unit Internet protocol address databases.
- SINCGARS and EPLRS radio hop set data.
- COMSEC requirements.
- Positioning of EPLRS position server links.
- Modifications to digital communications structure (digital architecture).

DIGITAL TECHNIQUES FOR A LINKUP OPERATION

7-29. Depending on the enemy situation and METT-TC, the initial conduct of the linkup operation may be identical to an exploitation or attack. During the operation, the BCT commander monitors the progress and execution through data passed using ABCS to ensure positive control measures established are followed or adjusted as required. Adjustments made to the OPORD are coordinated and synchronized by way of digital systems. If a FRAGORD is passed by FM voice, a digital follow-up is entered and transmitted through FBCB2 to ensure all units are aware of the change.

7-30. As the linkup forces begin their approach, they establish digital and FM voice communications and maintain them throughout the operation. As each force maneuvers, progress is tracked by way of FBCB2, and adjustments to the linkup plan are made as METT-TC dictates. For example, if two forces are involved in the operations and one is unable to travel at a speed commensurate with the plan, the linkup location may require adjustment.

7-31. The CAB FC changes or activates FSCM established for the operations based on the progress of the forces and the enemy situation. All changes are provided to the FCs of the maneuver units involved in the linkup through FBCB2 or AFATDS. As the maneuver units draw closer to one another, Coordinated fire lines are canceled and a RFL is placed into effect to prevent fratricide between the converging forces. Once the linkup has occurred, fire support is organized as per the higher headquarters OPORD.

7-32. The CAB commander positions himself to observe the progress of the operation and maintains both digital and FM voice communications with the S-3. Effective digital communication provides the commander flexibility in positioning since he can maintain a COP of both maneuver units and adjust the linkup plan as required. The S-3 is positioned based on the operational concerns expressed by the battalion commander. For example, if a certain flank is of concern to the commander during the operation, or a supporting attack is required to penetrate the enemy's lines, then the battalion S3 is located where he can best influence the battalion's secondary action.

7-33. When the linkup is complete, the linkup force may join the stationary force, pass through the stationary force, go around the stationary force, or continue the attack.

SECTION IV – BATTLE HANDOVER

7-34. Battle handover is a coordinated operation executed to sustain continuity of the combined arms fight and to protect the combat potential of both forces involved. A passage of lines is an operation in which one unit moves through another unit's positions with the intent of moving into or out of enemy contact. Battle handover is usually associated with the conduct of a passage of lines.

BATTLE HANDOVER PLANNING

7-35. Battle handover can occur during either offensive or defensive operations. During defensive operations, it is usually planned and coordinated in advance to facilitate execution and usually involves a RPOL. In the offense, it is situation dependent and often initiated by a FRAGORD. Battle handover usually occurs in the offense when one unit passes through or around another unit. TACSOPs containing clear, simple, standardized procedures and control measures enhance the ability of units to coordinate without experiencing a corresponding loss in momentum.

7-36. Battle handover occurs along a line forward of the stationary force. The BCT commander establishes this line in coordination with both stationary and passing battalion commanders. The stationary battalion commander usually determines the BHL location. This line is forward of the FEBA in the defense or the FLOT in the offense. The BHL is located where elements of the passing CAB can be effectively overwatched by direct fires or supported by indirect fires of the forward combat element of the stationary CAB until the battle handover is complete.

7-37. Physical handover usually occurs near the battle handover line. Events may dictate that a force break contact forward of or behind the BHL; for example, when there is a gap between echelons of the attacking enemy force. Close coordination (physical, digital, or voice) between the battalions involved in the handover allows them to coordinate and execute this process at the small-unit level.

7-38. The battle handover operation begins on order of the brigade commander of the units involved or when a given set of conditions occurs. Defensive handover is complete when the passing battalion is clear and the stationary battalion is ready to engage the enemy. These actions may occur at the same time. Offensive handover is complete when the passing battalion crosses the BHL. The BHL is usually considered the LD for the attacking battalion. Until the handover is complete and acknowledged by the commanders, the battalion commander in contact is responsible for coordinating the fight.

COORDINATION FOR BATTLE HANDOVER

7-39. Coordination for battle handover flows from the battalion commander out of contact to the battalion commander in contact. The coordination for a battle handover overlaps with the coordination for a passage of lines; the coordination for both should be accomplished at the same time. The TACSOP should outline these coordination requirements to facilitate rapid accomplishment.

7-40. Digital information systems assist the battalion staff in its coordination and synchronization efforts for the operation. Each unit transmits or delivers a complete copy of its OPORD and overlays by either digital or analog means. Any changes made after initial distribution are updated immediately. The coordination between the two commanders involves—

- Establishing digital and FM voice communications.

- Providing updates of both friendly and enemy situations (digital, voice, and graphical).
- Coordinating passage points and routes and ensuring these are displayed on operational overlays (digital and analog).
- Collocating command post and exchanging liaison personnel (if required).
- Coordinating fires (direct and indirect) and ensuring the direct fire control measures and FSCMs display on operational overlays (digital and conventional).
- Providing updated obstacle overlays including self-destruct date-time groups of emplaced Family of scatterable mines (FASCAM) obstacles.
- Determining the need for and dispatching contact point representatives.
- Establishing and coordinating recognition signals.
- Exchanging locations of obstacles and related covering fires.
- Exchanging route information to include way points.
- Determining sustainment requirements.

7-41. Due to the fluid nature of a battle handover, commanders can use digital systems to speed the planning, coordination, and execution processes. Units should plan FM voice; if digital capabilities are hampered, then units should use FM to coordinate and execute battle handovers.

SECTION V – PASSAGE OF LINES

7-42. A *passage of lines* is an operation in which a force moves forward or rearward through another force's combat positions with the intention of moving into or out of contact with the enemy. (JP 1-02) Units usually conduct forward and reward passage of lines when at least one METT-TC factor does not permit the bypass of a friendly unit. A passage of lines is a complex operation requiring close supervision and detailed planning, coordination, and synchronization between the battalion commanders of the unit conducting the passage and the unit being passed. The primary purpose of a passage of lines is to transfer responsibility (forward or rearward) for an area from one unit to another. Units can conduct a passage of lines to—

- Continue an attack or counterattack.
- Envelop an enemy force.
- Pursue a fleeing enemy.
- Withdraw security forces or MBA forces.

ORGANIZATION OF FORCES

7-43. A passage of lines does not require a special task organization. Both the passing force and the stationary force maintain their previous combat organization during the passage. A forward passing unit's order of march is generally reconnaissance (scouts) and security elements first, followed by ground combat forces support elements (engineers, artillery) and then sustainment forces.

PLANNING

7-44. The ABCT plans and conducts a battalion-level passage of lines. Units involved in a passage of lines must conduct detailed coordination to ensure they maintain positive control to avoid fratricide, speed the passage, and reduce vulnerability to enemy attack. The S-2 leads the staff in IPB, and the S-3 prepares a concept of operations based on stationary force restrictions, the IPB, and parameters established by the battalion commander. The S-3s of the passing battalion and stationary battalion coordinate routes, checkpoints, linkup points, and passage points. Planners must evaluate the following basic considerations and integrate them into the planning process:

- **Terrain management and control measures.** Terrain management is critical to successful completion of a passage of lines. Terrain is controlled through the sharing of digital overlays that contain the following:
  - Routes (primary and alternate).
  - Checkpoint data.

- Friendly and enemy unit locations and status.
- Passage points.
- Contact points.
- FSCMs.
- Obstacle types and locations.
- Sustainment locations and descriptions.

- **Liaison.** Stationary and passing battalions exchange information by way of extensive and detailed coordination and liaison before mission execution.
- **Communications.** Communication architectures, digital systems, COMSEC instructions, recognition signals, and communications procedures and requirements must be identified, synchronized, and integrated into the OPORD. Communications ensure units share data and pertinent combat information and maintain a COP.
- **Mission transition.** Plans for the conduct of the passage must facilitate transition to the subsequent missions of both the passing and stationary battalions.
- **Exchange of AO control.** Control of the AO passes from one battalion to the other at a time and place directed by the higher common commander or as mutually agreed on by the stationary and passing battalion commanders.
- **Routes.** The passing battalion moves on multiple routes through the passed battalion and avoids the use of assembly areas. It does not halt within the passed battalion's forward positions.
- **Employment of deception obscuration.** Deception obscuration operations can deceive the enemy as to actual unit locations, passage points or actual activity and intention of U.S. forces pertaining to the conduct of current or near-term military operations.
- **Control measures.** Established graphic control measures can ensure positive control of both the stationary and passing units.
- **Location of stationary battalion and obstacles.** The location and obstacle emplacement of the stationary battalion may influence planning and execution of the FPOL.

7-45. The terrain and number of the passage lanes determine the speed and disposition of the passing battalion as it crosses the LD. When conducting a forward passage in preparation for a deliberate attack, it may be important to create passage lanes with sufficient width to allow the passing force to move in a tactical formation appropriate to the operation, such as company or platoon wedge.

FIRE SUPPORT

7-46. The passing battalion FSO reviews the fire support plan of the stationary unit and conducts direct coordination to ensure that a clear understanding exists between the passed and passing units on the established FSCMs. He does so through the transfer of digital fire support overlays between the two FCs via AFATDS. The maneuver commander identifies and approves procedures to establish fire support battle handover or transfer of control. Terrain and route management for artillery batteries and their support assets are especially important due to potential terrain limitations and must be coordinated at the BCT level. All artillery units, including reinforcing units, must be positioned to support the passage if enemy contact is possible during the operation.

ENGINEER SUPPORT

7-47. A passage of lines may require either the reduction of some obstacles or the opening and closing of lanes through friendly obstacles. The passing and stationary engineers must coordinate via digital means or face-to-face meeting. At a minimum, this coordination must address the following:

- Location and status of friendly and enemy tactical obstacles.
- Routes and locations of lanes and bypasses through friendly and enemy obstacles.
- Responsibility to close lanes through obstacles.
- Transfer of obstacle and passage lane responsibilities.
- Description of lane marking materials.
- Description of far and near recognition markers.

SUSTAINMENT SUPPORT

7-48. The sustainment plan is integral to a successful passage of lines. Sustainment assets are positioned to support the passage. MCPs and emergency refueling points are positioned where they can best keep lanes open and vehicles moving.

7-49. Conducting a passage of lines presents a challenge for the medical planner. There will be a number of medical evacuation units using the same air and road networks. Coordination and synchronization are essential if confusion is to be avoided. The medical elements of the stationary force should provide area support to the force passing through; this allows continued mobility for the moving force. Examples of information that should be coordinated include the following:

- Radio frequencies and call signs.
- OPORD and TACSOP.
- Location of medical treatment facilities (MTFs).
- Location of casualty collection points and AXP.
- MSR, forward arming and refuel points, and airspace control data.
- S-2 updates including areas of previous and/or anticipated attacks/ambushes/engagements.

FORWARD PASSAGE OF LINES

7-50. In a FPOL conducted as part of a BCT attack, both the stationary and passing battalion commanders must be aware of the passing battalion's objective. This awareness is especially important if the stationary battalion must provide supporting fires. The stationary battalion and forward passing unit, through an exchange of combat information, share data needed to affect a passage of lines in a timely and safe manner.

7-51. On receipt of an order, the passing battalion commander begins preparing his passage of lines plan by conducting a reconnaissance while concurrently updating the information received from the stationary battalion. For example, the passing CAB receives a digital operations overlay that delineates routes to the contact points as well as the location of the actual linkup site. The battalion commander and staff of the passing unit meet representatives from the stationary battalion at designated contact points to conduct coordination. During the physical reconnaissance, the passing battalion S-3 updates the initial operations overlay, incorporating information received from the stationary battalion by adding pertinent control measures. On completion, the passing battalion S-3 forwards this overlay to the main CP. Based on this information, the passing battalion staff completes development of the plan. Once approved by the battalion commander, additional control measures are added to the operations overlay as necessary to complete the plan.

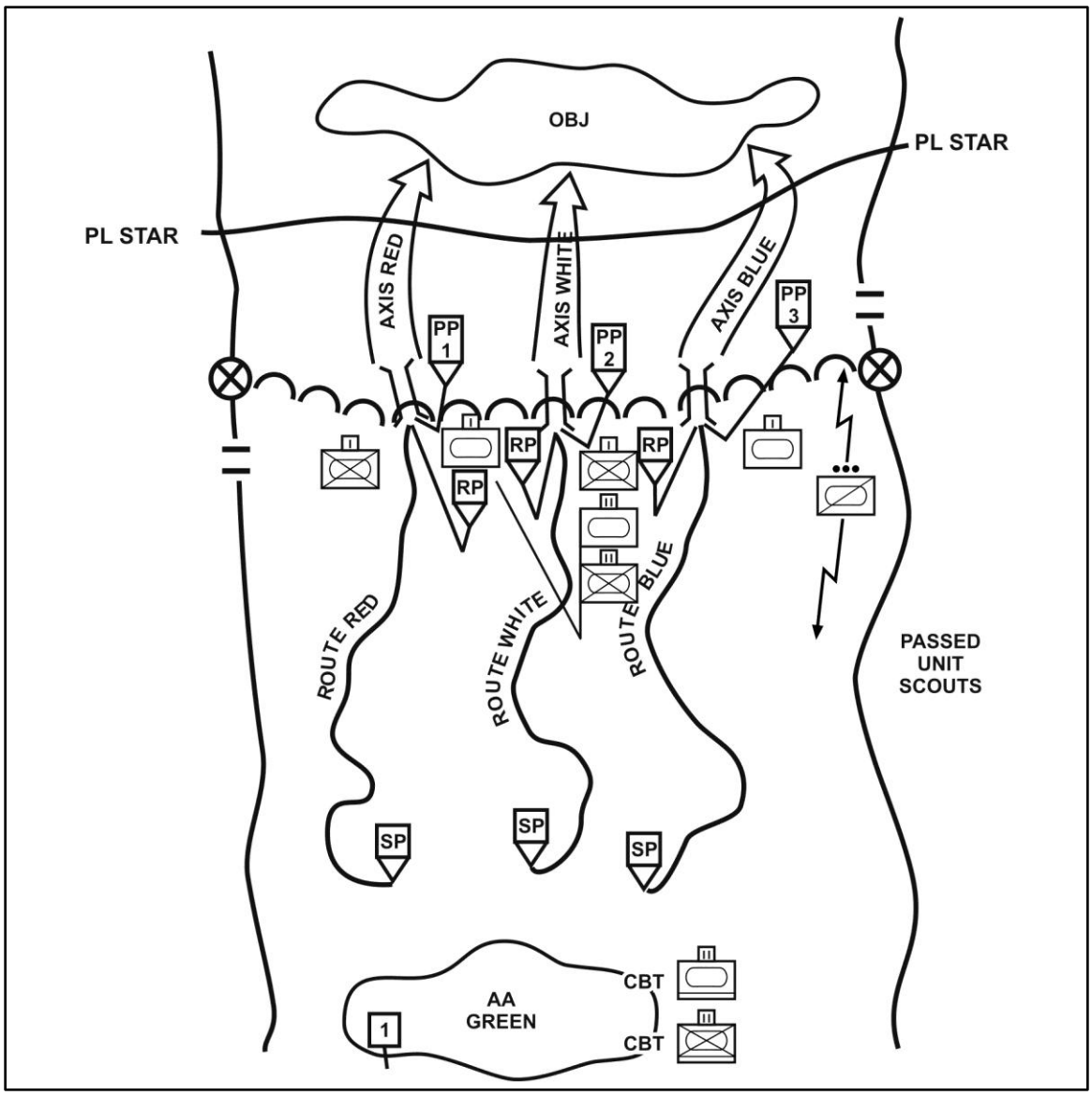


Figure 7-1. Forward passage of lines

7-52. The passing battalion main CP forwards the validated operations overlay update containing information from the stationary and passing battalions, BCT, and subordinate units to the liaison teams. This technique enables the passing S-3 and battalion commander to develop their scheme of maneuver for the passage of lines on a digital overlay concurrent with reconnaissance. At the conclusion of the reconnaissance and subsequent coordination with the stationary battalion, the revised passing battalion plan is distributed digitally by the battalion headquarters using FBCB2.

REARWARD PASSAGE OF LINES

7-53. Typically, a RPOL occurs within a defensive framework in which elements of the security force (for example, a cavalry squadron) operate forward of the MBA. MBA forces are the stationary unit in a RPOL. The covering force withdraws through them, handing off control of the fight at the BHL.

7-54. To facilitate a RPOL, the stationary force commander designates the following:

- Battle handover line.
- Contact points forward of the battle handover line.

- Passage points along the forward edge of the battle area.
- Lanes to the rear of the main battle area.

7-55. Once he prepares the overlay, the stationary commander transmits it and any amplifying information to the passing force commander by way of FBCB2 or MCS.

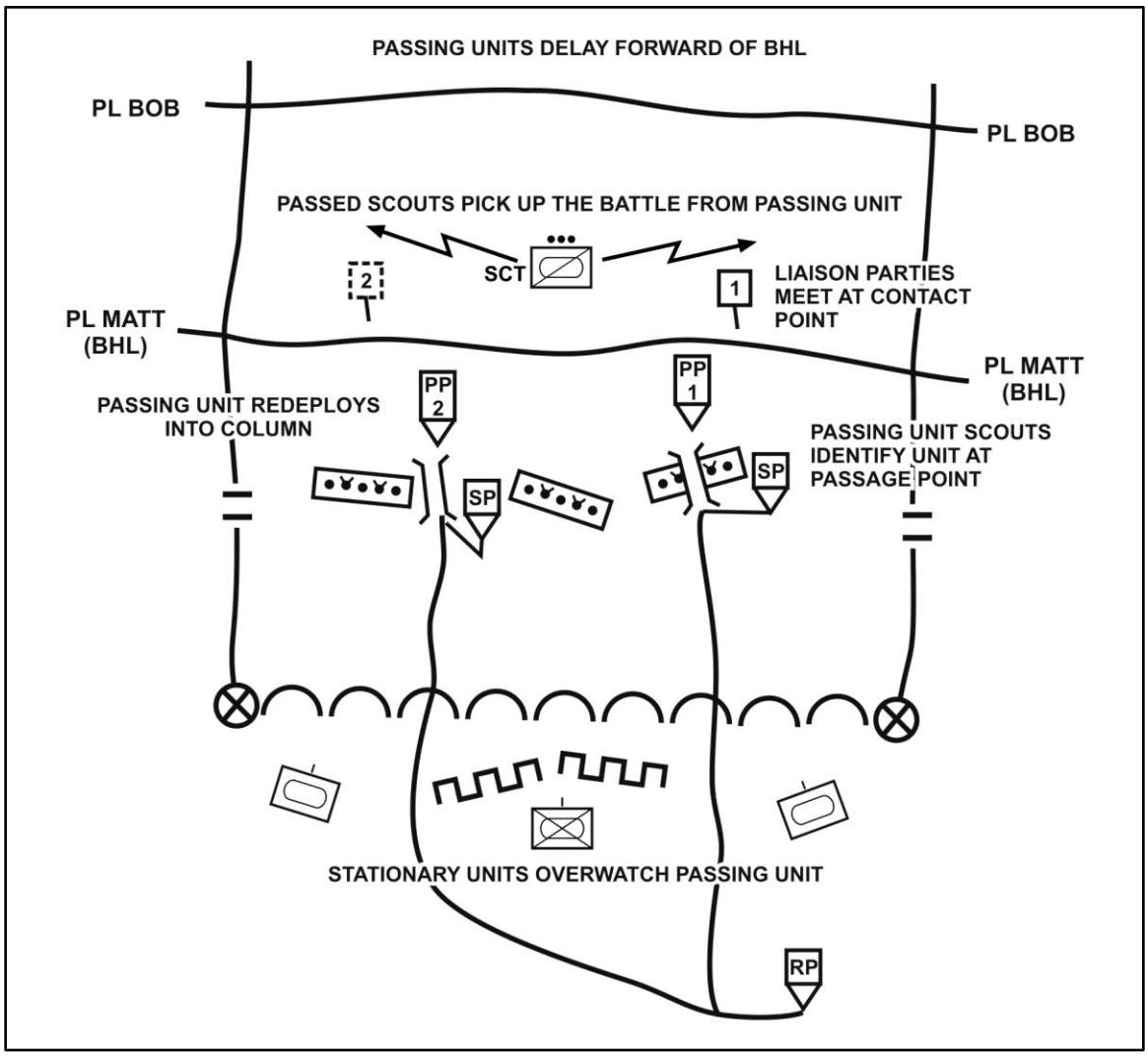


Figure 7-2. Rearward passage of lines

7-56. During a passage of lines, friendly unit density in a relatively small maneuver space may cause problems in the ability of the commanders to maintain the COP in relation to both the passed and passing units. The stationary and passing commanders should determine the best method of exercising mission command to avoid slowing the tempo of the operation and to reduce fratricide potential.

REHEARSAL

7-57. During the rehearsal, the battalion commander ensures that each organization knows when and where to move as well as how to execute the required coordination. Digital communications checks ensure connectivity and interoperability. Other rehearsal items include the following:

- Fire support observation plan, target execution, communication linkages, and mutual support operations. Confirm FSCMs. Review unit routes and positioning.

- Locations and descriptions of obstacles, lanes, bypasses, and markings.
- Passage points, routes, and recognition procedures. Verify these and review numbers of vehicles by type expected at each passage point. Confirm route management, contact points, and use of guides.
- Locations for and movement of sustainment units. Arrange for mutual support and any transfer of supplies.
- Locations of aid stations, AXPs, and casualty evacuation procedures.

SECTION VI – RELIEF IN PLACE

7-58. A relief in place is an operation in which one unit replaces another in combat. The incoming unit assumes responsibility for the mission and the assigned AO. Units usually execute relief operations during limited visibility to reduce the possibility of detection. To facilitate and ensure successful operations, the linkup and relieved force commanders and staffs exchange as much information as possible. This prevents the inadvertent engagement of friendly forces by either direct or indirect fire systems during relief operations. Collocation of CPs for both types of units is recommended during the relief.

PLANNING CONSIDERATIONS

7-59. On receipt of the order to conduct the relief, the incoming CAB commander and staff establish continuous communications with the stationary unit. This is done primarily through an exchange of liaison personnel and a digital exchange of information pertinent to the relief operations (for units in the same digital architecture). Commanders and staffs emphasize communications, reconnaissance, and transfer of command. If possible, the relieving unit's main CP should collocate with the main CP of the unit to be replaced. This facilitates continuous information exchanges relative to the occupation plan, fire support plan, and intelligence updates, which include past, present, and probable enemy COAs. Although digitization allows coordination without physically locating together, face-to-face coordination reduces any potential misunderstanding related to relief preparation or the forthcoming operations. Units transfer responsibility for the area as directed by the senior common commander, usually when the incoming unit has a majority of his fighting force in place, and all communications systems (voice and digital) are operating.

TRANSFER OF INFORMATION

7-60. Before contact with the stationary unit, the relieving force digitally receives the combined arms graphics, FSCM, obstacles, linkup points, signals, and current enemy situation by way of overlays (digital or acetate). Analog units should exchange this information through liaison personnel and conventional acetate overlays.

FRATRICIDE AVOIDANCE

7-61. When planning the relief, the battalion staff should consider the realities of risk management and fratricide avoidance in determining the most appropriate method for executing the relief. FBCB2 and the battlefield combat identification system aid in differentiating friendly from enemy as units conduct the linkup and passage of lines. This greatly reduces fratricide potential and expedites forward movement since the relieved force can monitor the progress of the linkup force. The relieved force can provide protective fires or adjust fire control measures predicated on the speed with which the linkup force is moving.

METHODS OF RELIEF

7-62. There are three techniques for conducting a relief: sequentially, simultaneously, or staggered. A sequential relief occurs when each element within the relieved unit is relieved in succession, from right to left or left to right. A simultaneous relief occurs when all elements are relieved at the same time. A staggered relief occurs when the commander relieves each element in a sequence determined by the tactical situation. (Refer to ADRP 3-90 for more information.)

SEQUENTIALLY

7-63. This method is the most deliberate and time consuming of the relief methods. It involves sequentially relieving maneuver companies one at a time. The CAB plans separate routes to the rear of the relieved companies' locations for each maneuver company, and places these plans on the operations overlay. To avoid cluttering the FBCB2 display, only the routes of the relieving force are included on the operations overlay. The CAB labels routes sequentially to correspond to the order in which the company will use the routes during the relief. When the lead relieving company reaches its release point, its platoons move to the positions they will occupy. Crews exchange range card and fire support information, and the relieved unit then moves to the rear to its next location. When the lead relieving company is in position, the next relieving company moves along its designated route to relieve its counterpart, repeating the relief process. This process repeats until each company has been relieved. If the BCT directs a transfer of supplies from the relieved unit, the battalion S-4 coordinates a transfer point to execute the exchange.

SIMULTANEOUSLY

7-64. This method is the fastest, but it risks revealing friendly unit intentions. To expedite the relief, the in-place battalion prepares FBCB2 overlays to depict current friendly graphics, fire support measures, and the latest enemy situation update. These overlays are passed to the relieving force before the two forces make contact. Once the two command groups collocate and exchange plans, relief occurs at the same time at each location. The units of the relieving and relieved battalions execute a move at the same time along different routes. Relieved units withdraw as soon as they are relieved, and do not wait for other units of the battalion to be relieved. The control measures at the battalion level are identical to those used for a sequential relief (one unit at a time).

STAGGERED

7-65. This technique requires sufficient terrain to accommodate positioning of two similarly sized units at the same time. In this case, the relieving unit must locate where it can observe and provide protective direct and indirect fires for the relieved unit using the relieved units' fire plans. This procedure requires that relieving company and battalion commanders conduct a detailed physical reconnaissance of the position occupied by their in-place counterparts. The relieving commanders and staffs enter operational information gathered from the physical reconnaissance on operations overlays, and share them throughout the relieving unit during the planning process.

MISSION COMMAND DURING THE RELIEF

7-66. During the relief, the command group and the staff in the main CP monitor the progress of the relief through FBCB2 and their personal observations. To facilitate uninterrupted fires and effects to support the relief, indirect-fire assets should be the last units relieved regardless of the relief technique used. Throughout this process, the battalion may have to observe radio-listening silence until control of the position passes to the commander of the relieving force. When the companies are set, and the relieved unit withdraws from the position, company commanders send the battalion S-3 a spot report indicating that the company is defending.

7-67. If either force makes direct-fire contact with an enemy force during the relief, it immediately notifies the other unit and the higher headquarters by voice communications. It then follows-up this voice report with an FBCB2-generated contact or spot report, so that the precise location of the enemy force (enemy icon) is displayed on FBCB2. If responsibility for the AO has not passed, the relieving unit becomes OPCON to the relieved unit. The assets and staff of the relieved unit become OPCON to the relieving unit when the responsibility for the AO has passed to the relieving CAB.

SECTION VII – SITE EXPLOITATION

7-68. Site exploitation is systematically searching for and collecting information, material, and persons from a designated location and analyzing them to answer information requirements, facilitate subsequent

operations, or support criminal prosecution. (ATTP 3-90.15) Cordon and search techniques are frequently employed to conduct site exploitation.

7-69. CABs may conduct site exploitation in the conduct of reconnaissance, security and other operational task during unified land operations. Leaders can deliberately plan for site exploitation, but must also develop TACSOP to conduct on order, or at opportunistic times to exploit personnel, documents, electronic data, and information captured during operations. Examples of unforeseen events that might require a hasty site exploitation include the discovery of—

- Chemical, biological, radiological, nuclear, and high-yield explosive threats.
- Significant environmental hazards (hazardous materials or waste).
- High-value individuals.
- External disruptions, such as enemy attacks, that require protecting the site until specialized teams arrive to neutralize or reduce the threat.
- A large munitions or explosives cache.
- Information that meet the criteria for a sensitive site

7-70. Site exploitation fundamentally serves three basic purposes:

- Answer information requirements.
- Facilitate subsequent operations (through intelligence, analysis, and targeting).
- Facilitate criminal prosecution by host nation authorities.

ORGANIZATION FOR SITE EXPLOITATION

7-71. When planning for a site exploitation, the commander should plan his organization around the framework of search, collect, analyze, and disseminate. This framework along with the factors of METT-TC will help the commander determine the size and assets required to secure a site and conduct site exploitation. CAB personnel focus on search and collect while the intelligence and other experts analyze starting at the point of capture to national level agencies. The same elements that analyze disseminate developed intelligence back down to the capturing unit.

7-72. Assets that assist with the execution of site exploitation include portions of a document and media exploitation team, an EOD exploitation team, or criminal investigation support. Document and media exploitation runs the spectrum from hasty analysis of personal documents or pocket litter, to mirror imaging media and expediting various forms of media, to fusion cells for further exploitation. EOD site exploitation teams conducting blast analysis can include specialized support from joint weapons intelligence teams. Criminal investigation may incorporate host-nation support, the Central Intelligence Agency and other governmental agencies.

7-73. Regardless of the size of the element conducting the exploitation, the staff should assign a team leader responsible for planning, organizing, equipping, and executing the site exploitation. At the CAB level, this may be the assistant S-3, a company commander, or other staff member. At the company level, it may be a platoon leader, a squad leader, a section leader, or a representative from the headquarters element. At the CAB level, an noncommissioned officer (NCO) from the S-2 section may be considered.

7-74. Subordinate to the team leader will be a minimum of two elements: one for conducting tactical questioning, and another for conducting the search and analysis. The size and scope of these elements, along with the establishment of additional elements, vary with METT-TC considerations. Additional elements include detainee, documentation, field interview, demolitions, and tunnel reconnaissance teams. Figure 7-3 and 7-4 show potential site exploitation organization for a CAB and company level site exploitation.

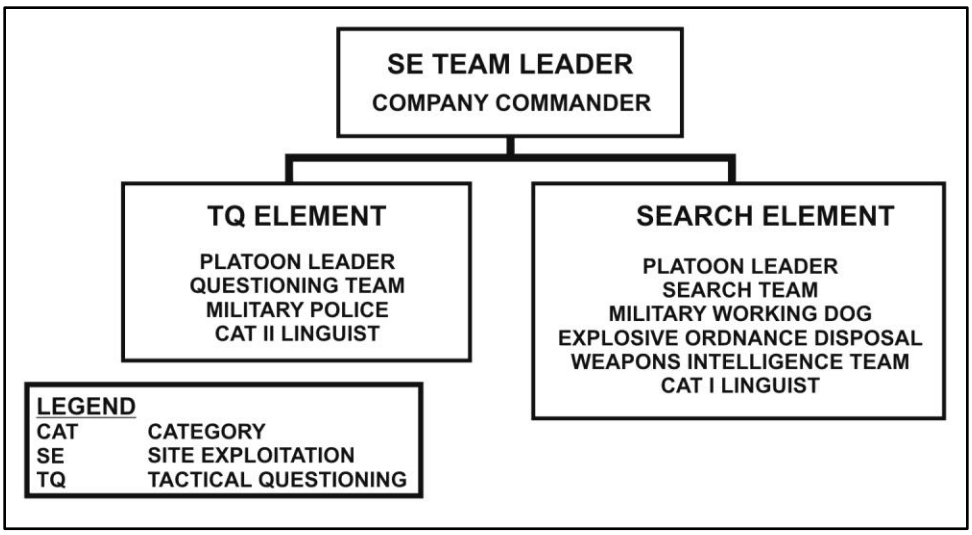


Figure 7-3. Sample CAB site exploitation organization

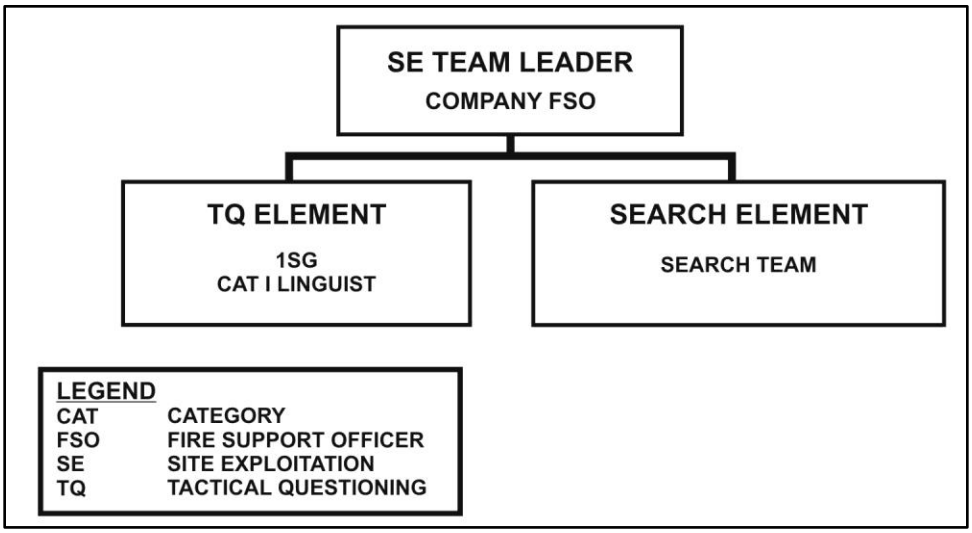


Figure 7-4. Sample company level site exploitation organization

7-75. The CAB does not possess many of the organic assets required to complete detailed Site exploitations Based on the staff's estimate, the battalion might require attachments from EOD, military intelligence, and MP units as discussed above. When these teams are not available, the commander and the staff must clearly identify these shortfalls and determine where these assets reside. If these assets are held at the BCT or higher headquarters, the staff must determine the triggers and response time should their support be required. Internally, the staff must plan to identify subordinate units to fulfill these roles while understanding their organic capabilities and limitations. (Refer to ATTP 3-90.15 for more information.)

SE Personnel Duties and Responsibities

7-76. All personnel on site exploitation have specific tasks to complete. The personnel and their tasks are explained below.

Team Leader

7-77. The team leader tasks include:

- Commanding site exploitation team.

- Initiating and controlling site exploitation.
- Completing initial sketch of site.
- Documenting all activity.
- Deconflicting/validating information with each element.
- Reporting and recommending action on immediate intelligence to commander.
- Supervising collection of all personnel and material.
- Ensuring unit photographs detainees with evidence of illegal activity.

Search Element

7-78. The search element tasks include:

- Conducting detailed search of target according to plan.
- Ensuring improvise explosive device (IED) awareness.
- Identifying and processing evidence.
- Recovering evidence.
- Preparing evidence for transportation.
- Recoving document evidence.

Tactical Questioning Element

7-79. The tactical questioning element tasks include:

- Identifying/prioritizing subjects for tactical questioning.
- Coordinating security for collected personnel.
- Separating personnel as required for questioning.
- Conducting tactical questioning.
- Identifying/prioritizing subjects for removal/detention.
- Documenting all tactical questioning.

EXECUTION

7-80. The execution of site exploitation normally occurs after forces have seized, cleared, or otherwise controlled the objective to the point where the exploitation team can conduct the search to the level of detail required with appropriate risk mitigation. In the case of a cordon and search operation, this could mean after the objective location has been isolated and secured; and after the IED threat on the objective has been mitigated by EOD or explosive detection dog, if available. At a minimum, the site exploitation team should understand the level of threat remaining on the site prior to exploitation. The site exploitation team leader conducts an initial debrief of the assault force (initial entry force), and then assesses the site to make a determination of the scope and breadth of the exploitation required.

7-81. Upon completion of the initial assessment, the team leader updates instructions to the search teams, takes/directs initial photographic evidence of the site, completes a sketch of the objective site, and coordinates marking of the objective for documentation purposes. The tactical questioning element(s) coordinate with the search element to segregate personnel found on the objective in secure areas, noting where personnel were located based on the team leader's site sketch.

7-82. Search teams initiate the search of the site or objective using a defined pattern and collection process according to unit TACSOP. The team leader must have the ability to move throughout the site, and coordinate with the tactical questioning and search teams. The team leader can focus search efforts based on the information gained by tactical questioning, as well as guide the tactical questioning team based on the items that are uncovered during the search. This can be a useful tool to identify additional information, and determine if suspected personnel are attempting to deceive the tactical questioning team. METT-TC considerations may facilitate the use of the head of household to lead the search team. This can prevent the perception of destruction of property, and mitigate the risks of IEDs. However, this technique presents limitations to the search team as well.

7-83. Collection of material should be completed with appropriate marking and tagging according to TACSOP and theatre requirements. Special considerations for handling material that can be exploited for forensic evidence must be observed during collection, as well as observing for evidence that could be associated with detonation devices. When collecting material that may be used for evidence in judiciary proceedings, the material should be photographed with the suspected individual. Maintaining control and custody of collected material is also important to maintain the integrity of the search.

BIOMETRIC COLLECTION DEVICES

7-84. Some CABs will have biometric collection devices to collect physical information on key personnel. Biometrics positively identifies an encountered person. Fingerprints, iris pigmentation, facial geometry, voice, and handwritten signatures are all examples of characteristics that can be used to identify an individual, regardless of paper documents, disguises, or aliases. This data is combined with local and national databases. The intelligence data, coupled with verifiable biometrics, enables the commander to perform more precise and effective targeting missions. (Refer to ADRP 2-0 for more information.)

WEAPONS OF MASS DESTRUCTION ELIMINATION OPERATIONS

7-85. Weapons of mass destruction elimination (WMD-E) operations is a combined arms effort aimed to prevent the looting or capture of WMD and related material. It renders-safe or destroys weapons, material, agents, and delivery systems that pose an immediate and direct threat to our forces. It exploits program experts, document and other media and previously secured weapons and materials to counter further proliferation and prevents regeneration of the WMD capacity.

7-86. WMD-E requires the application of several CBRN passive defense principles, such as contamination avoidance through reconnaissance and surveillance; individual and collective protections; and decontamination.

Note. Once conventional CBRN forces arrive, they conduct assessment of the site and determine if the site requires exploitation. If the site is deemed to contain WMD, maneuver forces seize and secure the site until technical CBRNE forces arrive.

7-87. Once CBRN forces arrive and confirm WMD, maneuver forces seize and secure the site. Planners should address how and who on the site will detect, assess, and defeat site defenses and establish and maintain secure control of the site. After the maneuver forces have created favorable conditions for the technical CBRNE forces, the technical CBRNE forces advance to conduct the exploitation activity.

7-88. Maneuver forces continue to secure the site while technical CBRNE forces characterize, exploit and possibly neutralize hazards and disable weapons. Exploitation may often require a combined arms effort to help technical CBRNE forces to search the site for remaining sensitive or exploitable material; however, commanders should only use maneuver forces for actual WMD exploitation operations as a last resort. When the use of maneuver forces extend beyond securing the site commanders should coordinate with higher headquarters to ensure that the urgency of exploiting the site justifies the additional risk. Commanders should also organize and prepare carefully and proceed methodically. Commanders maintain site integrity to support follow-on exploitation across all domains.

7-89. Maneuver forces continue to support elimination operations. If the material is removed or transferred to another location, maneuver forces may be asked recon routes of travel and secure the material during transport. As forces continue through the destruction activity they move towards the final activity within WMD-E. Maneuver forces continue to secure material and other forces until the material is transferred to the appropriate authority for long term monitoring and redirection.

SECTION VIII – BREACHING OPERATIONS

7-90. Breaching is a synchronized combined arms operation under the control of a maneuver commander. Whenever possible, units should bypass obstacles, enabling them to maintain the momentum of the operation. Commanders must ensure that conducting the bypass provides a tactical advantage without

exposing the unit to unnecessary danger. Breaching operations begin when friendly forces detect and obstacle and no bypass meeting the commander's criteria can be identified. Breaching operations end when a lane through the obstacle has been created and friendly forces destroy the enemy on the far side of the obstacle or the enemy can no longer affect the breach site with the use of direct fires.

BREACHING TENETS

7-91. Breaching tenets are characteristics common to successful breaching operations. The tenets apply whenever a unit encounters an obstacle. Whether friendly forces are conducting an attack or conducting route or area clearance operations, they follow these breaching tenets:

- Intelligence.
- Breaching fundamentals.
- Breaching organization.
- Mass.
- Synchronization.

INTELLIGENCE

7-92. It is critical to determine how the enemy applies obstacles to the terrain. The commander and staff conduct IPB to develop an initial situation template with expected obstacle locations. Intelligence gathered by reconnaissance is essential to developing a finalized situation template and final point of breach locations. Unverified enemy situation templates might cause friendly forces to deploy to reduce obstacles early, waste mission time attempting to locate nonexistent obstacles, develop COAs using ineffective obstacle reduction methods, or become surprised by an obstacle. Engineer teams can augment reconnaissance forces as part of the overall information collection plan. Examples of OBSTINTEL requirements include:

- Location of existing or reinforcing obstacles.
- Orientation and depth of obstacles.
- Soil conditions (determines ability to use mine plows).
- Lanes or bypass locations.
- Composition of minefields (buried or surface laid antitank and antipersonnel mines .
- Types of mines and fuses (determines effectiveness of mechanical or explosive reduction techniques).
- Composition of complex obstacles.
- Suspected intent of obstacle.
- Location of direct- and indirect-fire systems overwatching obstacle.

BREACHING FUNDAMENTALS

7-93. Successful obstacle breaching depends on the CAB effectively applying the breaching fundamentals of SOSRA. Deliberate, hasty (includes instride), and covert are the three general types of breaching operations. (Refer to FM 3-34.22 for more information.) Breaching fundamentals always apply; however, they must adapt to the varying factors of METT-TC. Breaching fundamentals include:

- **Suppression.** Units use direct and indirect suppressive fires to protect friendly forces reducing and maneuvering through an obstacle. Typically, successful suppression initiates the rest of the actions at the obstacle.
- **Obscuration.** Obscuration degrades enemy observation and target acquisition by enemy forces while concealing friendly force reduction and assault activities. Obscuration planning factors include wind direction, type of obscuration systems available (mechanical smoke, artillery-delivered, mortar-delivered, smoke pots), and the capabilities and limitations of these systems. Typically, the most effective placement of obscuration is between the obstacle and the overwatching enemy forces.

- **Secure.** Friendly forces secure the point of breach to prevent enemy forces from interfering with the reduction of lanes and passage of assault forces. The CAB must provide the breach force with sufficient combat power to secure the point of breach.
- **Reduction.** The creation of lanes through an obstacle is reduction. Units cannot accomplish reduction until they achieve effective suppression and obscuration, and secure the point of breach. The breach force reduces, proofs, and marks the required number of lanes to pass the assault force through the obstacle. Follow-on forces will continue to improve and reduce the obstacle when required.
- **Assault.** The assault force's primary mission is to seize terrain on the far side of the obstacle to prevent the enemy from placing or observing direct and indirect fires on the reduction area.

BREACHING ORGANIZATION

7-94. Commanders develop COAs that organize friendly forces into a support force, a breach force, and an assault force to quickly and effectively execute the breach fundamentals. (See Table 7-1.)

- Support force responsibilities are to isolate the reduction area with direct and indirect fires, suppress enemy direct and indirect fire at the point of breach, and control obscuration.
- The breach force must have sufficient combat power to secure the point of breach as well as sufficient reduction assets to clear the required number of lanes through the obstacle. Critial fire zones should be activated at the point of breach before commitment of the breach force to protect it from enemy indirect fires.
- The assault force's primary mission is the destruction of enemy forces and the seizure of terrain on the far side of the obstacle to prevent the enemy from placing direct fires on the breach lanes.

Table 7-1. Breaching organization

Breaching Organization	*Breaching Fundamentals*	*Responsibilities*
Support Force	Suppress. Obscure.	Support by fire. Suppress enemy with direct and indirect fires. Control obscuration (on the enemy) and screening obscuration (on the friendly movement).
Breach Force	Suppress (provides additional suppression). Obscure (provides additional obscuration in the reduction area.) Secure (provides local security). Reduce.	Confirm / Deny suspected bypass(es) near point of breach Establish near-side security. Reduce the obstacle. Proof and mark lanes or bypasses. Establish far-side security. Defeat forces that can place immediate direct fires on the reduction area. Report the lane status and location.
Assault Force	Assault. Suppress (if necessary).	Assist the support force with suppression if the enemy is not effectively suppressed. Secure the far side of an obstacle. Destroy any enemy forces capable of placing direct fires on the reduction area from the far side of an obstacle. Be prepared to breach follow-on and protective obstacles after passing through the reduction area.

MASS

7-95. The support force achieves mass by fixing and isolating enemy forces on the far side of the obstacle. The assault force achieves mass by projecting a 3:1 combat power ratio at the point of penetration

(typically one isolated enemy platoon in an enemy company-sized defense for a CAB breach). The breach force achieves mass by planning 50 percent redundancy of breach assets, creating one vehicle lane per each assaulting company-sized element, and creating two lanes separated by 800 to 1000 meters (terrain dependent) to pass the CAB.

SYNCHRONIZATION

7-96. Synchronization of all combined arms elements to successfully achieve the breach fundamentals is essential. Commanders achieve synchronization through detailed reverse planning of offensive operations (from the objective back to the assembly area) by issuing clear subordinate unit instructions, planning effective mission command, and ensuring their forces are well rehearsed. Detailed reverse planning is initiated during IPB and development of the enemy SITTEMP. The scheme of maneuver, engineer operations, fires, air defense, and actions at the obstacle are all based on this common SITTEMP. For example, the planning should consider the following:

- Actions on the objective determine the size and composition of the assault force based on desired 3:1 combat power ratio.
- The size of the assault force determines the number and location of breach lanes required.
- Lane requirements, and disposition and composition of the obstacles, determine the mobility asset requirement of the breach force.
- The enemy's ability to interfere with the breach force at the point of breach determines size and composition of the security element within the breach force.
- The enemy's ability to mass fires on the point of breach determines the amount of suppression required as well as the size and composition of the breach force.

7-97. Reverse planning begins with actions on the objective and continues to its deployment from tactical assembly areas to identify all mobility requirements. Reverse planning should include enemy special munitions capabilities and effects. (See Figure 7-5.)

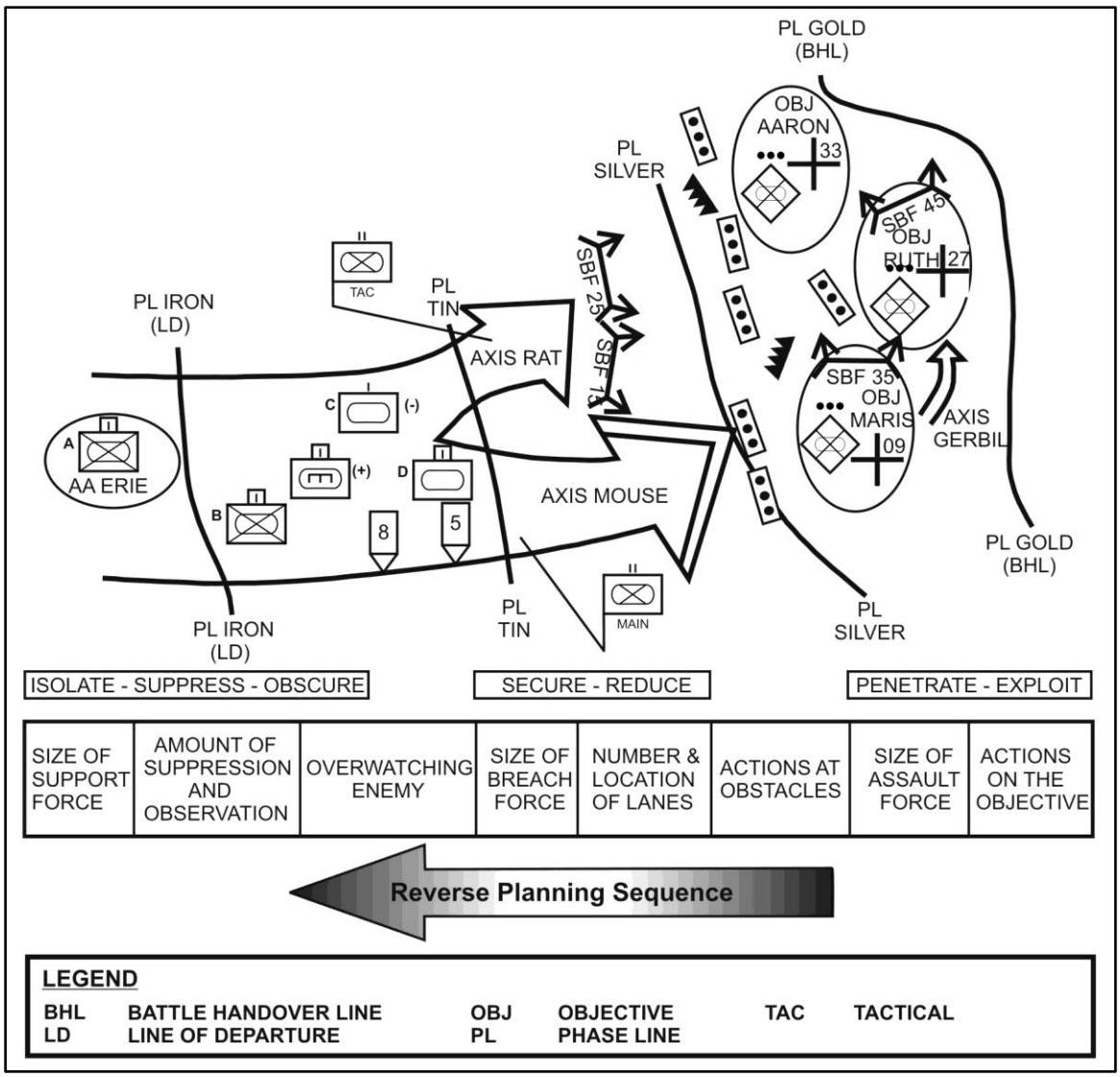


Figure 7-5. Breach reverse-planning sequence

PLANNING BREACHING OPERATIONS

7-98. Planning a breaching operation begins with the intelligence and engineer estimates. The CAB S-2 templates the enemy's threat characteristics and the battalion engineer assesses its engineer capabilities. Both the engineer and the S-2 template probable locations for the enemy's tactical and protective obstacles, based on threat pattern analysis. The battalion staff develops COAs using threat pattern analysis, and the engineer staff officer develops his scheme of engineer operations for each COA. After selecting a COA, the battalion commander must carefully allocate available assets to the breach, assault, and support forces to ensure that they can accomplish their assigned tasks.

7-99. Identifying the enemy's vulnerability is important so that the force can mass direct and indirect fires and combined arms against that weakness. The CAB isolates a portion of the enemy to achieve the desired combat ratio at the point of assault. It achieves mass by hitting the enemy from multiple directions and by narrowing attack zones to concentrate its force against a smaller defending element.

7-100. The commander must not commit all the engineers to breach the first obstacle system unless he is willing to risk his capability to breach follow-on obstacles. When the attack requires the breaching of two or more complex obstacle systems, the battalion commander must retain enough engineers and sufficient

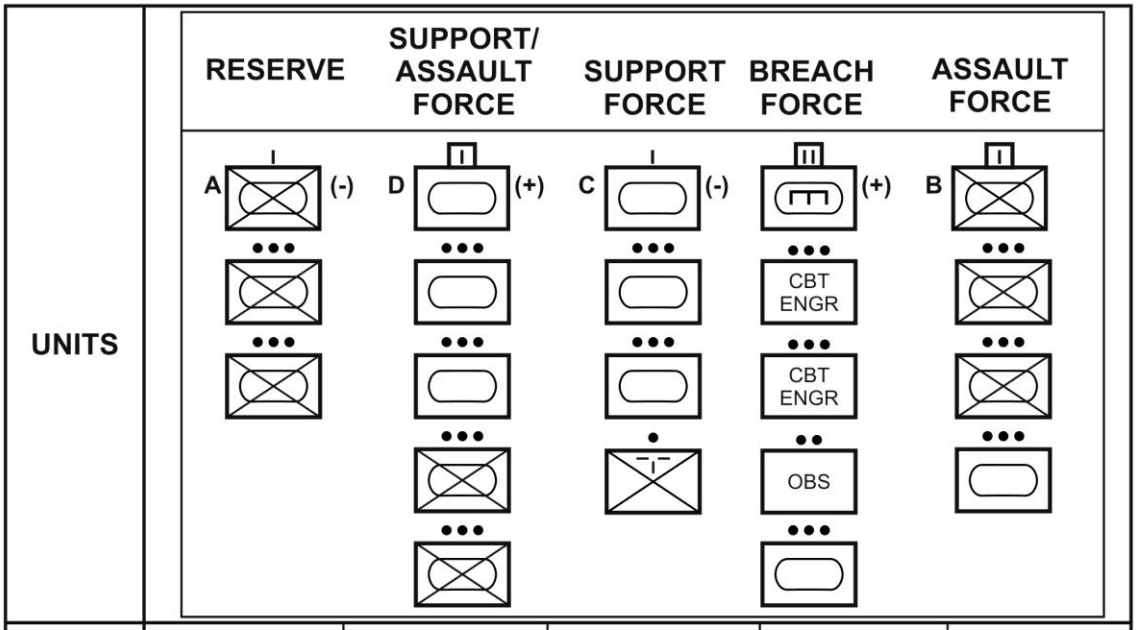
breaching assets to reduce subsequent obstacles. Depleted engineer forces need significantly more time to conduct follow-on breaches. In such cases, the battalion commander needs to request additional engineers to support the BCT's mission.

7-101. In task organizing for a combined arms breach during a deliberate operation, the CAB commander considers organizing a support force task with weapons capable of a high volume of direct suppressive fires. The breach force disposition and composition is METT-TC dependent; and is determined by combat power required to secure the point of breach and the reduction assets required to create the lanes. Figure 7-6 depicts the task organization for the concept of operations in Figure 7-5.

7-102. The battalion commander maneuvers his combat power to create sufficient suppression and security for the breach to be successful. Adequate suppression, obscuration, and security trigger the commitment of assault and breach forces. When the breaching site is free of direct fires, the commander deploys the breach force to create lanes through the obstacle. The commander must sense the progress of the breach so that he can decisively commit the balance of the force through the obstacle to continue the mission.

7-103. The breach and assault forces could require fires and obscuration under their control in addition to that controlled by the support force. Support, breach, and assault forces place direct fires on enemy positions. This makes synchronization of direct and indirect fires extremely complex. Fire control must be planned in detail using simple and well-understood control measures carefully rehearsed.

7-104. Sometimes the BCT conducts a combined arms breach during a deliberate operation, or plans to conduct a passage of lines of a large force after a breach. In such cases, breach plans must include detailed planning for the staging and movement of follow-on forces and equipment.



FORCE	RESERVE	SUPPORT/ ASSAULT	SUPPORT	BREACH	ASSAULT
LD to PL TIN	AA ERIE	Lead Team AXIS MOUSE	Lead Team AXIS RAT	Follow Team D AXIS MOUSE	Follow Team E AXIS MOUSE
PL TIN to PL SILVER	AA ERIE	Occupy CP 8	Occupy SBF 15 Orient on TRP 09	Identify breach points	Occupy CP 5
Obstacle reduction	O/O Occupy SBF 25 Orient on TRP 27	Occupy CP 8	Remain SBF 15 Orient on TRP 09	Conduct breach Create & mark 2 lanes	Identify lanes
Attack OBJ MARIS	O/O Occupy SBF 25 Orient on TRP 27	Occupy CP 5 Identify Lanes	Shift fires to TRP 27	Secure lanes	Seize OBJ MARIS Occupy SBF 35 Orient TRP 27
Attack OBJ RUTH	O/O Occupy SBF 25 Orient on TRP 33	Seize OBJ RUTH AXIS GERBIL	Shift fires to TRP 33	Secure lanes	Shift fires Orient TRP 33
Attack OBJ AARON	Move to OBJ RUTH	Seize OBJ AARON	Lift fires	Secure lanes	Lift fires
Consolidate	Prepare hasty defense Orient East	Prepare hasty defense Orient North East	Occupy CP 5 as Reserve	Improve lanes Mark obstacles	Prepare hasty defense Orient South East

Note: Main effort has double box.

LEGEND

CP	CHECK POINT	O/O	ON ORDER
CBT ENGR	COMBAT ENGINEER	PL	PHASE LINE
LD	LINE OF DEPARTURE	SBF	SUPPORT BY FIRE
OBJ	OBJECTIVE	TRP	TARGET REFERENCE POINT
OBS	OBSTACLE		

6333

6334 **Figure 7-6. Organization for breaching operation**

PREPARING FOR BREACHING OPERATIONS

7-105. The CAB continues an aggressive information collection plan using scouts, engineer reconnaissance teams, patrols, and aerial reconnaissance. The S-2 and the staff engineer continually refine the template based on hard intelligence. The commander may adjust task organization as it uncovers more details of the defense and obstacle system. It also uses this information during the combined arms rehearsals.

7-106. Continuous and aggressive information collection updates the enemy template as information becomes available. These changes are reflected as soon as possible in the rehearsal area. If updates become available after the last rehearsal, the CAB S-3 immediately passes this data to the affected force elements, especially the breach force.

7-107. The CAB meticulously plans, manages, and controls the rehearsals. The battalion S-3 allocates time for each unit to perform a combined arms rehearsal. When possible, the force rehearses the operation under the same conditions expected during the actual engagement, including battlefield obscuration, darkness, CBRN mission oriented protective posture, and inclement weather. The rehearsal site reflects the actual obstacle system in as much detail as possible, as well as examples of lane marking. The force chooses terrain as similar as possible to that of the operational area, and constructs a practice obstacle system based on OBSTINTEL. Rehearsals include a leader and key personnel walkthrough, as well as individual and full dress rehearsals by support, breach, and assault forces.

7-108. When the commander rehearses the breaching operation, he also rehearses several contingency plans. The contingencies should include possible enemy counterattacks and attack by enemy indirect-fire systems. Rehearsals also include enemy use of CBRN munitions and FASCAM deployment.

COLLECTIVE OBSTACLE INTELLIGENCE

7-109. The breach will fail if the CAB does not have enough combat power to suppress the enemy's fires, or enough breaching equipment to reduce the obstacles. Therefore, the size of the enemy force and the type of obstacle are PIRs for reconnaissance. The S-2 confirms and updates the enemy template as intelligence reports are received. If necessary, the S-3 revises the plan. As the commander's PIRs are answered, it may be necessary to refine the task organization of support, breach, and assault forces and the concept of operations. The sniper squad can also keep the area of the breach under observation and continually update the S-2.

7-110. Engineer reconnaissance teams can be attached to the battalion scout platoon to gather detailed information on obstacle locations, composition, and orientation. Like any specialized collection asset, the engineer teams work for the scout platoon leader, and are integrated into the total battalion collection plan. The battalion S-2 and engineer provide the scout platoon with specific NAIs for engineer teams to reconnoiter.

7-111. OBSTINTEL collection is particularly difficult when the breach is part of a movement to contact. Although engineers may be attached to the scout platoon, their ability to close with and gather detailed OBSTINTEL in time for the advance guard or main body to react is limited. Furthermore, organizing for a breach in a movement to contact quickly consumes the number of engineers available for the reconnaissance effort. The commander must determine which has a greater effect on the CAB's mission accomplishment: an engineer squad performing reconnaissance or an engineer squad conducting breaching.

SUSTAINMENT SUPPORT

7-112. Combat trains usually transport critical engineer Class V materials, such as an emergency resupply of demolitions for the engineer force. The battalion commander, engineer, and S-4 anticipate when these assets might be used and develop a plan for rapidly moving them forward. Plans must be in place for evacuating casualties since increased numbers of casualties should be anticipated during a breach operation.

EXCUTING BREACHING OPERATIONS

7-113. The force crosses the LD organized to conduct the combined arms breach. If the battalion encounters obstacles en route, it executes the breach with this organization. On arrival, the scout platoon adjusts artillery fires on the enemy positions to cover deployment of the support force. The support force moves into position and establishes its support by fire (SBF) position. Breach and assault forces move into position and prepare to execute their tasks. The battalion commander continues to incorporate last minute information into his plan and makes final adjustments of positions and locations.

7-114. The support force occupies its SBF position and begins suppressing with direct fires. The battalion FSO executes group targets planned on enemy positions. Mortar and artillery smoke are adjusted to obscure the breaching site from enemy target acquisition. The breach force begins movement once suppression and smoke are effective, based on clearly defined commitment criteria. Timing is critical since the high volume of suppressing fires and obscuration can be sustained only for a short duration. SBF positions have interlocking sectors of fires and are positioned to ensure suppression of the enemy's positions.

7-115. Once suppression and obscuration have built to effective levels, the breach force moves forward to the breaching site. The engineers create the lanes, while the combined arms breach force provides for local security. The assault force penetrates the objective after receiving the order from the battalion commander. Due to the complexity of the breach, the mission command systems spread out to ensure synchronization. The battalion S-3 may control the multi-company support force while the CAB commander positions himself where he can best control the entire breaching operation.

7-116. A CAB needs at least one lane for each assaulting company (vehicle mounted) and one footpath per assaulting platoon (dismounted). The distance between lanes is tied to the concept of operations, the complexity of the terrain, and the composition and disposition of the overwatching force. General guidelines for the distance between lanes are—

- 800 to 1000 meters between vehicle lanes (based on the complexity of the terrain and the probability of enemy SCATMINE employment).
- Up to 100 meters between footpaths (usually based on the ability of the support force to achieve suppressive fires).

CONTINUING AN ATTACK

7-117. The enemy obstacle system acts as a chokepoint and is dangerous even after the CAB has overcome the defenses. The CAB constructs additional lanes to speed the passage of follow-on forces. Next, it widens the lanes to allow two-lane traffic through the obstacles, and constructs switch lanes to prevent blocking by disabled vehicles or artillery fires. Deliberate marking and fencing systems are installed, and military police assets establish the necessary traffic control. Eventually, follow on engineer forces clear the obstacles and eliminate the chokepoint. After passage through the lanes, the combined arms force continues its mission.

7-118. Both the breaching and follow-on force must be aware of the potential for the enemy to reseed breached obstacles with remotely delivered SCATMINEs or other rapidly emplaced obstacles. The breaching commander may develop a response plan and position remaining mobility assets near the breach lanes to re-breach, repair, or improve lanes as necessary. In addition, the commander can develop a reaction plan for combined arms or other forces that encounter a reseeded portion of the obstacle while passing through the lane. The commander of the follow-on force, regardless of the reported status of the breach lanes he is about to pass through, should organize mobility assets forward in his formation that are prepared to re-breach, repair, or improve these lanes as necessary.

SECTION IX – GAP CROSSING OPERATIONS

7-119. The purpose of any gap crossing operation is to project combat power across a linear obstacle to accomplish a mission. Historically, doctrine addressed these gaps as rivers, but there are many other gaps that Army units encounter. A gap crossing is a unique operation. It requires specific procedures, detailed planning, and technical support that differ from other tactical operations (Refer to FMs 3-34.22 and 3-90.12 for more information.)

7-120. The three types of gap crossing operations are hasty, deliberate, and covert. Regardless of the type of crossing, the planning requirements are similar (Refer to FM 3-90.12 for more information.)

- A hasty gap crossing is a continuation of an attack with no intentional pause to prepare for a crossing. This is possible when enemy resistance is weak and the gap is not a severe obstacle. It is the preferred type of crossing. Examples include the seizure of existing fords or bridges.
- A deliberate gap crossing is required when there is a significant linear obstacle, strong enemy resistance, and the necessity to clear entry and or exit banks of enemy forces. This type of crossing requires centralized planning and control by a division or BCT; thorough preparations including the time to perform extensive reconnaissance and rehearsals; and the massing of forces and crossing equipment.
- The covert gap crossing is a gap crossing used to overcome gaps (wet or dry) without being detected by the enemy. It is used when surprise is essential to infiltrate across a gap and when limited visibility and gap conditions present an opportunity to accomplish the crossing without being seen. The CAB will typically not conduct a covert gap crossing due to its mechanized equipment. Dismounted Infantry may be used in a covert fashion to support the CAB in a deliberate gap crossing.

HASTY GAP CROSSINGS

7-121. CABs routinely make hasty gap crossings and reorganize on the far side to maintain the momentum of operations. The information provided through ABCS reduces uncertainty about the enemy and friendly situation, enabling the battalion to move rapidly to undefended or lightly defended crossing sites.

7-122. Hasty gap crossings tend to be focused on a combined arms operation to project combat power across a terrain feature (wet or dry) that can be overcome by self-bridging assets within the BCT. These assets may be organic, provided as augmentation, or found as expedient crossing materials within the AO. They typically are, but are not limited to, gaps that are 20 meters or less in width. They are normally done through tactical bridging, such as the armored vehicle-launched bridge, joint assault bridge , Wolverine, or rapidly emplaced bridge. Most hasty gap crossings will be conducted using tactical bridging. They may also include support bridging and expedient bridging or gap crossing by other means.

HASTY DRY GAP CROSSING

7-123. Antitank ditches and craters are usually what CABs encounter as a dry gap obstacle. Dry riverbeds may also present a crossing problem to vehicles. If an engineer support platoon is attached, the CAB can use the XM1150 Assault breacher vehicle or M9 armored combat earthmover to push down the sides of ditches or to fill in craters. Substantial fill material placed in the dry gaps allows the passage of combat vehicles. Follow-on forces can improve and maintain the crossing site for wheeled-traffic use.

7-124. For larger dry gaps, streambeds, antitank ditches, craters, canals, partially blown bridges, and similar obstacles, the CAB must request an armored vehicle launched bridge through the BCT. When available, an armored vehicle launched bridge can be launched in 2 to 5 minutes and retrieved in 10 minutes. An armored vehicle launched bridge crosses gaps of up to 17 meters in length (without prepared abutments) with a military load classification of 70. A limited number of M104 Wolverine Heavy Assault Bridges are available. They have the capability to cross gaps up to 24 meters with a military load classification of 70. Bridges should be left in place across the gaps only as long as it takes the CAB to cross; then replaced with other fixed bridging, if necessary. The need for bridging must be identified well before the operational need develops, or the momentum of the operation will come to a halt.

HASTY WET GAP CROSSING

7-125. Bank conditions, the depth and width of the wet gap, and the current's velocity determine whether the CAB can cross its vehicles by fording or using other bridging assets. Identifying wet gaps early and deploying the required bridging resources allow hasty crossings of known or anticipated gaps to occur.

7-126. Because vehicles drain rapidly when exiting water obstacles, initially firm banks tend to deteriorate rapidly from multiple uses of the same exit point. The existence of mud or surface irregularities further degrades the percent of the slope that vehicles can overcome. When selecting a fording site in a wet-gap crossing, the depth of the water is the most significant factor. The depth of the water in one crossing area may change due to bottom surface mud or irregularities (boulders and potholes).

7-127. Generally, advance elements seize existing crossing means intact and ahead of the main body. If possible, the CAB crosses the water obstacle at multiple points across a broad front by fording mounted or dismounted forces. It makes the crossing as soon as its elements reach the obstacle. As the bulk of the CAB crosses the water, minimum forces remain to secure the crossing sites.

7-128. The CAB may use expedient crossing means if they are readily available, and can be transported to the crossing site. Battalion scouts and other reconnaissance elements should note construction material or existing features that could be used as expedient crossing devices. These include culvert pipe, lumber or cut timber, or war-damaged equipment. The pipe links system, which consists of bundles of 8-inch, high-density plastic pipes chained together, can fill gaps up to 9 meters deep and support up to 70 tons.

7-129. When facing negligible or light enemy resistance on both banks, the force does not have to clear all enemy forces from the river to conduct a hasty crossing. It capitalizes on the speed of the crossing and the limited ability of the enemy to oppose the crossing effectively.

DELIBERATE GAP CROSSINGS

7-130. CABs do not make deliberate gap crossings independently; these are centralized operations where the controlling echelon is the BCT or higher. Deliberate gap crossings require extensive engineer augmentation from an engineer brigade or a maneuver enhancement brigade. Their support is available only when higher headquarters has adequate time to position the assets at the right place to conduct a crossing.

7-131. The organization of a deliberate gap crossing usually consists of an assault force, assured mobility force, bridgehead force, and breakout force. The CAB operates as one of these elements during a deliberate crossing.

- The assault force seizes the far-shore objective and eliminates enemy direct fires on the crossing site.
- The assured mobility force provides crossing means, traffic control, and obscuration. The force usually consists of maneuver, engineer, MP, and CBRN units.
- The bridgehead force attacks from the far shore objective to secure the bridgehead, eliminating enemy direct fire and observed indirect fire on the crossing area.

7-132. Once the gap crossing is completed, and the bridgehead secured, a breakout force crosses the gap behind the bridgehead force and attacks out of the bridgehead. This element usually is not part of the assault force. (Refer to FM 3-34.22 and ATTP 3-90.4 for more information.)

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Chapter 8

Augmenting Combat Power

"We cannot count on the instinct for survival to protect us against war."

Ronald Reagan

To accomplish the assigned mission, the CAB commander must integrate and synchronize all warfighting functions as enablers to enhance the combat power of his maneuver companies. This chapter describes the fires, aviation, protection, inform and influence activities, and engineers into CAB operations.

Section I – Fires

8-1. Fires are the use of weapons systems to create a specific lethal or nonlethal effect on a target. (JP 3-09) The fires warfighting function is the related tasks and systems that provide collective and coordinated use of Army indirect fires, air and missile defense, and joint fires through the targeting process. (ADRP 3-0) The role of fires is to enable the CAB commander to seize and retain the initiative, gain and maintain freedom of movement and action, and defeat adaptive threats across the range of military operations. Fires are surface-to-surface, surface-to-air, and joint fires including electronic attack. Fires are integrated and synchronized in support of the scheme of maneuver.

8-2. The CAB commander uses fire support to create effects and set conditions to achieve their objectives. Each fire support task and purpose directly supports a maneuver task and purpose. Integrating fire support digital systems with other mission command systems enhances the CAB's ability to focus fires by providing the commander with improved SU that enhances his ability to exploit his AO rapidly with fires.

8-3. The Army must be dominant across the range of military operations. It must always be prepared to fight in high intensity conflict but is equally likely to conduct operations in mid- to low-intensity conflicts. Thus, forces that provide fires must be able to operate throughout an entire operational environment that encompasses space, air, maritime, and land domains, and the information environment, and other variables. Fires must focus on the concentration of effects and not on the concentration of forces.

8-4. Their first priority is to support forces in contact. Fire support organizations help shape the operational environment, provide force protection, and set conditions for the ground maneuver forces they support. Modern weaponry, real-time information, and precision munitions allow for widely dispersed and noncontiguous forces to conduct simultaneous operations throughout the entire AO.

FIRE SUPPORT ORGANIZATIONS

8-5. The CAB FC plans, prepares, executes and assesses fires in support of current and future operations. The FC back briefs targeting guidance to the commander in accordance with the commander's intent for fires and maneuver, develops HPTs and prioritizes targets for attack, matched to a wide range of targeting and delivering systems. Collocated and integrated with the FC, is the Air Force Tactical Air Control Party (TACP). The TACP provides linkages to higher echelon TACPs to plan, prepare, execute, and assess air support for CAB operations, and maintains situational understanding of the total air support picture. Every CAB has a habitual relationship with a fire support platoon comprised of a FC and company FIST as shown in Table 8-1.

FIRE CAPABILITIES IN SUPPORT OF THE CAB

8-6. The CAB commander's primary fie support assets are its mortars and field artillery support delegated to the CAB based on the ABCT commander's tasks. Priorities of military fires will likely shift from between supporting and main efforts throughout operations.

FIELD ARTILLERY

8-7. Field artillery is the maneuver commander's principal means for providing indirect fire support to his maneuver forces. The mission of the field artillery is to destroy, defeat, or disrupt the enemy with integrated fires to enable maneuver commanders to dominate in unified land operations. Field artillery elements within maneuver organizations serve as the integrating center for all elements of fire support. Field artillery delivery systems include cannons, rockets, and missiles. These systems can provide fires under all conditions of weather and in all types of terrain. They can shift and mass fires rapidly without having to displace.

8-8. Within the ABCT, the fires battalion has three batteries of six M109A6 Paladin self-propelled 155-mm howitzers. Each battery has two three-gun platoons.The headquarters and headquarters battery is equipped with both counterfire radars and lightweight counter-mortar radars.

MORTARS

8-9. Mortars are organic to all CABs. The mission of mortars is to provide immediate and close supporting fires to the maneuver forces in contact. Maneuver unit mortars provide close, immediately responsive fire support for committed companies. These fires harass, suppress, neutralize, and destroy enemy attack formations and defenses; obscure the enemy's vision; and inhibit the enemy's ability to maneuver. Mortars can also be used as final protective fires, obscuration, and illumination.

8-10. The CAB commander decides how and when to integrate mortars, as a key fire support asset. However, since they are fire support assets, the FSO should give advice and make recommendations to the commander. The amount of control the FSO has over the employment of available mortars is a matter for the supported unit commander to decide. The commander may specify mortar support for subordinate units by changing the command relationship, assigning priority of fires, or assigning priority targets.

8-11. Synchronization of the mortar fire plan and scheme of maneuver with the CAB fire plan and scheme of maneuver are critical to realizing the full potential that the mortar platoon brings to the battlefield. The mortar platoon leader participates in the CAB fire support rehearsals to ensure the mortar platoon can accomplish its essential tasks for fire support.

Table 8-1. CAB fire support sections

CAB FC	Armor Company FIST	Infantry Company FIST
Fire Support Officer	Fires Support Officer	Fire Support Officer
Asst Fire Support Officer	Fire Support Sergeant	Fire Support Sergeant
Fire Support Sergeant	Fire Support Specialist	Forward Observer (4)
Targeting NCO	Radio Telephone Operator	Fire Support Specialist
Fire SPT Sergeant		Radio Telephone Operator (4)
Fire SPT Specialist (2)		
EW Sergeant (2)		

8-12. The CAB FSO supervises fire support activities in the CAB. These include planning, coordinating, integrating and synchronizing all forms of fires, to include joint fires and electronic attack. The FC is organized to help the CAB commander and S-3 integrate fires in support of current and future operations. The major functions of the FC include:

- Plan, integrate, coordinate, and synchronize through targeting, Army and joint fires and, when directed by the maneuver commander, other nonlethal effects.
- Coordinate target acquisition, target dissemination and target engagement.

- Integrate and synchronize airspace coordination requirements with Army and joint air capabilities which include FSCMs and ACMs.
- Produce and execute the fire support plan.
- Manage target nominations and track the life cycle of the nomination.
- Interface with all boards/cells.
- Provide input to the collection plan.
- Conduct fires, assess, and recommend re-attack.
- Recommend FSCMs and ACMs.
- Coordinate position areas for fires units with maneuver and airspace control agencies.
- Request and coordinate CAS and air interdiction.

8-13. The EW sergeant provides the CAB with an improvised explosive device expert. The EW sergeant also provides the commander and staff guidance on how the electromagnetic spectrum can impact operations, and how friendly EW can be used to gain an advantage in support of tactical and operational objectives across unified land operations. They provide military assistance involving the use of electromagnetic energy to determine, exploit, reduce, or prevent hostile use of the electromagnetic spectrum; provides technical assistance to support units; maintains and assists in developing the EW running estimate.

TACTICAL AIR CONTROL PARTY

8-14. The USAF augments the CAB's fire support assets with a TACP that provides an ALO, NCO and enlisted Soldier to plan, control, and direct close air support. The collaborative working relationship established between the TACP with their CAB provides a working knowledge of ground operations and enhances their ability to integrate fixed wing operations with ground schemes of maneuver effectively.

8-15. TACPs coordinate activities through an Air Force air request net and the advanced airlift notification net. The TACP performs the following functions:

- Serve as the USAF commander's representative, providing advice to the CAB commander and staff on USAF capabilities, limitations, and employment.
- Coordinate with respective FC to synchronize air and surface fires.
- Prepare the air support plan to include CAS, interdiction, airlift, reconnaissance, and suppression of enemy air defenses (SEAD) operations.
- Provide appropriate final attack control for CAS.
- Operate the Air Force air request net.
- Develop contact points, initial points, and aircraft coordination areas in coordination with the FSO and S-3. Once developed, the TACP disseminates this information to the air support operations center (ASOC) and other USAF activities.
- Coordinate aircraft forward to the appropriate contact point or initial point and then hands them off to the JTAC.

JOINT TERMINAL ATTACK CONTROLLER

8-16. An NCO, serves as the JTAC. The JTAC is a qualified (certified) service member who, from a forward position, directs the action of combat aircraft engaged in CAS and other air operations. (JP 3-09.3) They also coordinate air defense and airspace management between the Army aviation element and the ASOC. CAB JTACs have the added responsibility of terminal attack control.

8-17. The primary responsibility of a JTAC is the positive control of CAS aircraft flying missions in support of the CAB. JTACs monitor the ground tactical situation using electronic COP displays and voice radio nets to prevent fratricidal air-to-ground or ground-to-air engagements.

FIRE SUPPORT PLANNING AND COORDINATION

8-18. Fire support planning and coordination ensure that the CAB synchronizes all available fire support in accordance with the commander's concept of operations. The key to effective integration of fire support is the thorough inclusion of fire support in the operations process, and a vigorous execution of the plan supported by an aggressive coordination effort. Fire support planning is accomplished using targeting and the running estimate. The objective of fire support planning is to effectively integrate fire support into the fight to optimize combat power. Initiated during mission analysis and continuing through post-execution assessment, fire support planning includes the end state and the commander's objectives; target development and prioritization; capabilities analysis; commander's decision and force assignment; mission planning and force execution; and assessment.

8-19. *Fire support coordination* is the planning and executing of fires so that targets are adequately covered by a suitable weapon or group of weapons. (JP 3-09) It provides a way to deconflict attacks, reduce duplication of effort, facilitate shaping of the battlefield, and avoid fratricide. Coordination procedures must be flexible and responsive to change, with simplified arrangements for approval or concurrence.

PRINCIPLES OF FIRE SUPPORT PLANNING

8-20. The principles of fire support planning are—

- Plan early and continuously.
- Exploit all available targeting assets.
- Consider the use of all lethal and nonlethal attack means.
- Use the lowest echelon capable of furnishing effective support.
- Use the most effective fire support means.
- Furnish the type of fire support requested.
- Avoid unnecessary duplication.
- Coordinate airspace.
- Provide adequate fire support.
- Provide rapid and effective coordination.
- Consider the use of fire support coordination measures.
- Provide for flexibility.
- Protect the force.

8-21. The effectiveness of fire support planning and the fire support system depend on the successful performance of the three basic fires warfighting function tasks:

- Deliver fires.
- Integrate all forms of Army, joint and multinational fires.
- Conduct targeting.

ABCT RESPONSIBILITIES

8-22. The ABCT develops a synchronized scheme of maneuver and and scheme of fires. The scheme of fires assigns fire support tasks, and allocates assets and effects to subordinates. It is the brigade's responsibility to set conditions for and provide indirect field artillery fires in support of the CABs. The brigade may provide additional augmenting fires by coordinating with the division artillery or field artillery brigade. The BCT must clearly specify priority of fires. Refinements to the brigade scheme of fires from subordinate units are integrated via essential tasks for fire support. Finally, the brigade integrates the movement of artillery units with the scheme of maneuver.

8-23. The BCT's role in fire support planning includes the following tasks:

- Coordinate and synchronize air-ground operation.
- Implement the fire support plan.
- Conduct fire support planning.

- Coordinate target attack.
- Employ fires in support of the BCT.
- Synchronize all forms of fires (battalion - brigade).
- Conduct targeting (brigade - corps).
- Coordinate delivery of fires (brigade - corps).
- Establish target priorities (battalion - corps).

COMBINED ARMS BATTALION RESPONSIBILITIES

8-24. The CAB must understand the brigade concept of fires, its synchronization with the brigade scheme of maneuver, and its role in the execution of the Brigade scheme of fires. With this information, the CAB develops its own concept of fires. This concept involves assigned tasks from the BCT scheme of fires and targets to support the CAB close fight. This might require only the refinement of BCT targets, or it might require the CAB to submit new targets to support the CAB commander's concept of operations. The CAB develops a scheme of fires to support both those tasks assigned by the BCT and those targets developed by the CAB. It then issues the fire support plan to its subordinates, and incorporates bottom-up refinement to support the company commanders' schemes of maneuver. Finally, the CAB forwards its concept of fires and target refinements to the BCT, and participates in rehearsals to ensure the plan is clearly understood.

8-25. The CAB's role in fire support planning includes the following tasks:

- Coordinate air-ground operation when providing close combat attack (CCA) support.
- Conduct rehearsals with supporting fires agencies and airspace control agencies (battalion fires cell).
- Conduct fire support planning.
- Coordinate target engagement.
- Synchronize and integrate delivery of fires.

CAB COMMANDER RESPONSIBILITIES FOR ESTABLISHING TARGET PRIORITIES

8-26. The CAB commander is responsible for the effective integration of fires with his whole operation. The CAB commander's operational approach includes the scheme of fires, which enables commanders to shape the operational environment with fires to support the commander's requirements and objectives. The FSO provides the nucleus for effective fire support planning and coordination with the CAB S-3 and S-2, supporting field artillery, and other attack resources. The commander must take an active role in the development of the CAB concept of fires by articulating the mission tasks and purpose to the entire staff. Priority of fires is the commander's guidance to his staff to employ fire support in accordance with the relative importance of the unit mission. The guidance emphasizes in broad terms where, when and how the commander intends to synchronize the effects of fires and targeting functions with the other elements of combat power to accomplish the mission. (See Table 8-2.)

Table 8-2. Fire support planning responsibilities

Inputs to FC	BCT OPORD. Facts from higher (BCT), lower (FISTs), adjacent (other battalion FCs). IPB products (for example, situation template, threat COAs, high-value target list). Status of fire support assets (field artillery battalion and mortar platoon).
FC Actions	Review of BCT OPORD. Identify specified and implied tasks. Correlate status of fire support assets into capabilities. Integrate IPB products into targeting products (such as a high-payoff target list [HPTL]). Develop fire support tasks.
Outputs by FC	fire support portion of mission analysis brief. Recommended fire support tasks. Recommended target list. Submit IRs and RFIs to S-2. Fires paragraph and annex to OPORD.
CAB Commander Actions	Receive mission analysis briefing from FC. Issue fire support planning guidance and targeting priorities. Modify or approve fire support tasks. Provide commander's intent for fires.
Continuous Actions	Revise products based on commander's feedback. Provide technical directions to subordinate FISTs and mortar platoon. Conduct bottom-up refinement. Pass prioritized targets, effects and air support requests to BCT. Integrate scheme of fires with scheme of maneuver to develop initial COAs and final concept of operations.

SCHEME OF FIRES

8-27. The scheme of fires is a supporting element of the scheme of maneuver. The scheme of fires must describe what fires must do in order to achieve the commander's intent. It includes the priority of fires and explains what must be accomplished in clear, measurable, and understandable terms.

- The fire support tasks must include the purpose as well as who, what, when, where and why, and sometimes how, for each task. The FSO develops the scheme of fires in coordination with the S-3 and mortar platoon leader. When field artillery fires are allotted, the FSO also coordinates with the ABCT fire support coordinator and the field artillery battalion S-3 and FDC. The scheme of fires must identify all fire support tasks. (Refer to FM 3-09 for more information.)
- Once the CAB scheme of fires is finalized, it is essential that the CAB commander clearly articulate to the BCT commander and staff the importance of those fires to the CAB concept of operations. The CAB commander should be able to describe the impact on mission success if those fires are not received.

QUICK FIRE PLAN

8-28. The purpose of a quick fire plan is to quickly prepare and execute fire support in anticipation of an impending operation. Quick fire plan techniques constitute an informal fire plan. Brigade, battalion, or company FSOs may develop quick fire plans to support their respective organizations. Like all fire support plans, the maneuver commander approves the quick fire plan. In quick fire planning the FSO assigns targets (and possibly a schedule of fires) to the most appropriate fire support means available to support the operation. In this type of fire support planning the available time usually does not permit evaluation of targets on the target list and consolidation with targets from other fire support staffs and units. (Refer to FM 3-09 for more information.)

OBSERVATION PLANNING

8-29. The observation plan, a component of the fire support plan, should provide the task and purpose for each phase of the operation. The observation plan should be synchronized with the scheme of maneuver during the MDMP. The CAB FSO will develop the observation plan in concert with the S-2 and S-3, and use terrain based computer programs to assist with position selection. The observation plan ensures observers are in position to support each essential task to be accomplished by fire support assets. The observation plan should address:

- Where the observer needs to be.
- Security.
- Communications.
- How the observer gets into position.
- What the observer is to accomplish.
- Disengagement criteria, if necessary.
- Designated primary and alternate observers.

FIRE SUPPORT TEAM CONTROL OPTIONS

8-30. A critical observation planning issue that must be addressed at CAB level is who controls and positions the FISTs. (See Table 8-3.) The company commander needs the FIST company FSO to assist in his fire support planning and to trigger targets assigned to the company for execution in accordance with the CAB scheme of fires. The CAB commander or CAB FSO may also need to position FIST observers to ensure they are in the proper position at the right time to execute battalion-directed targets. In most cases, the control and positioning of FIST personnel depends on the mission.

Option 1: Centralized at the CAB Level

8-31. Consolidate FISTs at the CAB level to maximize the CAB commander's ability to influence the battle at a critical time and place. This option can provide the CAB commander flexibility and redundancy to meet the demands of a nonlinear or expanded area of operations. Company team commanders retain access to fire support expertise in the planning process while the FISTs are centralized at the CAB level for execution.

Option 2: Decentralized at Company Team Level

8-32. FIST assets remain at the company team level for fire support planning, coordination, and execution. This option sustains a habitual relationship between the FIST and the supported company. It retains trained observers to call for field artillery and mortar fires for that company or platoon. FIST personnel qualified and certified as joint fires observers provide information to the JTAC in support of Type-2 and Type-3 CAS.

Option 3: A Blend of Options 1 and 2

8-33. The CAB positions and employs selected FIST assets as needed. For example, the CAB might position a laser-equipped FIST headquarters vehicle with the senior fire support NCO at a CAB OP to execute a target supporting an essential task for an attack. This allows the company FSO to travel with the company commander in his vehicle to advise, coordinate, and call for fires.

Table 8-3. Sample FIST employment

Defense (Option 1)	The CAB retains control of the FIST because targets are fully synchronized with the CAB scheme of maneuver.
Movement to Contact (Option 2)	The company generally has control of the FIST because the situation is unclear.
Deliberate Breach (Option 3)	The support force and breach force controls the FISTs to provide redundancy at the point of penetration.

8-34. Regardless of how the CAB commander chooses to employ his FISTs, the CAB staff must provide each FIST with the observation plan. The observation plan provides the FIST with proposed OP locations (with routes to and from these locations) from which the FIST can best execute its assigned CAB mission or support its company's concept of operations.

TOP-DOWN FIRE PLANNING

8-35. To enhance the focus of fires, the CAB conducts formal fire planning through a deliberate top-down process with bottom-up refinement. This process occurs primarily during the "decide" phase of the targeting process (decide, detect, deliver, assess).

8-36. Top-down fire planning is a continuous process of analyzing, allocating, and synchronizing fire support. It determines—

- How the CAB will use fire support and what the essential tasks are.
- What types of targets will be attacked—resulting in the HPTL (decide).
- What type of targets will not be attacked.
- What collection assets are available to acquire and track the targets (detect).
- What assets the CAB will use to attack different targets; what munitions, what affects, and when they will be engaged (deliver).
- System preferences for various targets.
- What assets are available to verify (assess) effects on the target.

8-37. The basis of the top-down fire planning concept is that the plan originates at higher levels and is refined at lower levels. At the CAB level, the commander receives the top-down fire plan from the ABCT. This plan focuses the fire support effort exactly where the ABCT commander wants it in his area of operations. It provides detailed execution guidance, fire support tasks, allocation of resources, assigned target execution responsibility, and fully supports the ABCT's concept of operations. The CAB FSO, after receiving this plan, begins to refine targeting information based on how the CAB commander intends to integrate his plan into the Brigade plan.

8-38. Planning must be flexible to accommodate unexpected and rapid changes. The Brigade plan should contain only those fire support tasks necessary to support the commander's guidance for fires. Remaining assets are allocated to the subordinate CAB commanders according to their priorities for fires. In turn, each CAB commander develops a concept of fires to support his concept of operations/scheme of maneuver and assigned essential tasks. He may allocate any assets not planned for down to the companies for their planning and execution.

Note. When planning fires, it is essential to address the following aspects of each fire support task and target: purpose, location, trigger, shooter and backup shooter, sensor, observer and backup observer, communications structure, rehearsal, and delivery assets. If any of these requirements are not identified, planned, resourced, and rehearsed, the successful accomplishment of that fire support task is at risk.

8-39. The primary advantage of top-down fire planning is that the commander develops the concept of fires early, enabling the FC to plan concurrently. This process also allows for development of a plan that focuses the fires effort where and when and how the commander wants it.

8-40. Digitized systems facilitate the dissemination of plans; provide the commander with near-real-time information on the status of fire units; and allow him to modify and shift the focus of fires as the situation develops. The CAB commander can quickly assess where the focus of fires needs to be.

8-41. The allocation of resources in top-down fire planning should be more than the mere "blind" allocation of a number of targets for planning without regard for the purpose and achievable effects during that part of the operation. Allocations at each level should emphasize the purpose, planning, and execution of fire support tasks. For example, allocating three targets to a company commander for planning does not give him the possible purposes of those targets. However, allocating a subordinate a fire task in the form of a TAI for the destruction of a platoon during a certain portion of the operation better accounts for the

relationship of fires in time and space. The Brigade plan assigns execution responsibility down to the CAB. The CAB commander must then assign responsibility down to the companies.

8-42. Bottom-up refinement is a key element of top-down fire planning. During the decision making process, targets are planned based on map reconnaissance and situation templates. Targets must be refined based on the reconnaissance effort, actual occupation of the terrain, and updated intelligence. The establishment of fire support tasks early in the planning process allows company FSOs to be proactive in their refinement and planning. Targets that facilitate the accomplishment of fire support tasks can be nominated during the bottom-up refinement early in the planning process.

TARGETING

8-43. *Targeting* is the process of selecting and prioritizing targets and matching the appropriate response to them, considering operational requirements and capabilities. (ADRP 5-0) The purpose of targeting is to integrate and synchronize fires into unified land operations. Army targeting uses the functions decide, detect, deliver, assess (D3A) as its methodology. D3A is designed to enhance fire support planning and the intelligence targeting process. Its functions complement the development, planning, execution, and assessment of the effectiveness of targeting and weapons employment. Targeting is continuously refined and adjusted between the commander and staff as the operation unfolds. A Target is an entity or object considered for possible engagement or other action. (JP 3-60) Targets also include the wide array of mobile and stationary forces, equipment, capabilities, and functions that an enemy commander can use to conduct operations. These include:

- **Target acquisition.** Target acquisition is the detection, identification, and location of a target in sufficient detail to permit the effective employment of weapons. (JP 1-02)
- **Target discrimination.** Target discrimination is the process of applying a system, action, or function to identify or engage any one target when multiple targets are present.
- **Target engagement.** Target engagement is the process of applying a weapon system, capability, action, or function against a target to achieve a desired lethal or nonlethal effect in support of the commander's objectives.

TARGETING WORKING GROUP

8-44. Targeting is a command function that encompasses many disciplines and requires participation from the CAB staff elements. The commander's targeting guidance describes the desired effects to be generated by fires, physical attack and nonlethal activities. It must focus on essential enemy capabilities and functions that could interfere with the achievement of friendly objectives. Usually, targeting is synchronized within the setting of (informal) targeting working group sessions. Targeting working group sessions must be effectively integrated into the CAB battle rhythm and nested within the BCT targeting cycle to ensure the results of targeting focuses operations.

8-45. In general, battalions use an abbreviated form of a targeting working group session. Table 8-4 contains a list of staff member responsibilities for the targeting working group. The CAB FSO leads the targeting working group and the CAB XO chairs the targeting board. The session—

- Verifies and updates the HPTL and attack guidance.
- Establishes target selection standards.
- Nominates targets, FSCMS and ACMs to higher headquarters.
- Synchronizes the information collection plan with the fire support plan and observer plan.
- Synchronizes air and ground maneuver with fires to including recommendations for maneuver control measures, FSCMs and ACMs.
- Monitors fire support systems and ammunition status.
- Receives and evaluates battle damage assessment.
- Synchronizes lethal and nonlethal activities.

6875 **Table 8-4. Targeting meeting responsibilities**

Staff Member	Responsibility
XO	Reviews commander's guidance and commander's intent. Focuses targeting working group participants on the targeting board objectives. Arbitrates disagreements and ensures participants are actively involved. Focuses on the last time-phase line (for example, D+3 days).
S-2	Creates current enemy situation template, threat COA (event template). Proposes HVT sets and link analysis. Prepares current and proposed PIR, BDA and AO assessments. Determines impact of light and weather data. Designs a threat COA event template (D, D+1/2/3). Builds a collection emphasis to include brigade-directed NAI coverage. Gathers a collection synchronization to include counter mortar radars. Prepares a status of collection assets. Drafts information collection plan (D, D+1/2/3).
S-3	Briefs the status of current operations. Gathers and briefs friendly forces information requirement FFIR and commander's PIR (D-1 review; D, D+1/2/3 recommendations). Performs BCT-directed and implied tasks. Plans for adjacent units affecting operations D, D+1/2/3. Spells out task organization (assets available to include anticipated combat power). Gathers troops-to-task ratios.
FSO	Briefs current targeting products including the HPTL, attack guidance matrix, target selection standard, targeting synch matrix and fire support tasks (D, D+1/2/3) Briefs status of fire support assets. Recommends decide and detect data for TSM (D, D+1/2/3). Gathers radar operations and counterfire predictive analysis (D, D+1/2/3). Plans for approved preplanned air support requests and targets planned for next two air tasking order cycles. Plans for proposed HPTL for D, D+1/2/3. Briefs recommended changes to FSCM. Considers recommended changes, in conjunction with TACP, changes to working preplanned air support requests.
TACP	Advises on the employment of air assets. Approves submission of airspace coordination measure (ACM) requests.
Unit IO Officer	Updates MOE matrix. Recommends information related capabilities to be synchronized, messages and information engagement related targets.
CA Team Leader	Coordinates civil reconnaissance. Coordinates key leader engagement by constantly vetting contacts to eventually identify elites within the AO. Assists in the planning, coordination and management of CMO project management. Identifies and coordinates with NGO, and host-nation project management. Minimizes interference between civil and military operations. Synchronizes CMO to enhance mission effectiveness. Plans for vulnerabilities and flexibility (decision points).
Tactical MISO Team (TPT) Leader	Approves MISO plans and programs. Approves and availability of products. Instructs on TPT tasks and purposes. Creates products and distribution plans/synchronization.
Unit Public Affairs Representative	Creates a public affairs media engagement plan. Designs a public affairs information strategies and media facilitation. Lays out a media security plan.
TF engineer	Briefs a threat counter-mobility COA. Organizes the engineer and EOD assets available (D, D+1/2/3). Recommends reconstruction projects. Creates an environmental considerations assessment.
XO	Provides final guidance and direction to the staff.

REHEARSALS

8-46. Rehearsals are an integral part of the planning process. If possible the FSO conducts a fire support rehearsal prior to the combined arms rehearsal in order to provide the fire support cell additional time to rehearse fire support plans and products. The FSO participates in the maneuver commander's rehearsal and addresses specific fires portions of the plan. Both fire support and maneuver actions should be rehearsed to reinforce the scheme of maneuver and fire plan. Rehearsals should both practice and test the plan. Rehearsal procedures should be established as part of unit TACSOPs.

COMBINED ARMS REHEARSAL

8-47. The CAB commander personally leads the rehearsal. Usually, the CAB S-3 organizes the rehearsal using the commander's DST and the synchronization matrix; while the FSO uses the fire support execution matrix. Subordinate company commanders and the scout and mortar platoon leaders participate in the rehearsal. Other attendees include the CAB's primary staff, company FSO and FIST personnel, CBRN and engineer staff officers, ALO, and the aviation LNO.

FIRE SUPPORT REHEARSAL

8-48. The FSO runs the battalion fire support rehearsal. The fire support rehearsal focuses on the execution of fire support tasks, the fire support execution matrix, the effectiveness of FSCMs, and the timing and synchronization of all fire support efforts with each other and with the maneuver operation. This rehearsal generally follows the combined arms rehearsal in order to cover any changes made to the plan. The CAB S-2, S-3, TACP, firing unit leaders, and subordinate FSOs and observers should participate to—

- Confirm sequence of targets and desired effects.
- Depict enemy and friendly actions and reactions.
- Synchronize air ground operation.
- Validate observer plan and JTAC positioning.

8-49. The FSO establishes the time and location for the rehearsal. The FSO begins the rehearsal by announcing key times or phases of the operation. Each participant then executes the actions he will take, normally just short of actually delivering fires on the appropriate target. Additionally, the FSO ensures subordinate FSOs and observers understand their role in the CAB and BCT plan by having them articulate the targets and triggers for which they are responsible. They should discuss lifting and shifting of fires in sequence of the scheme of maneuver and identify FSCMs or ACMs in effect in relation to time, space, and purpose relevant to the mission. The key is to ensure the battalion is able to execute its fire support tasks.

8-50. Units use the fire support execution matrix as a script to conduct FS rehearsals, since the fire support execution matrix is tied directly to the concept of operations. The field artillery battalion representative uses and verifies the information in the field artillery battalion OPORD or field artillery support plan.

CLEARANCE OF FIRES

8-51. The commander is responsible for the clearance of fires. *Clearance of fires* is the process by which the supported commander ensures that fires or their effects will have no unintended consequences on friendly units or the scheme of maneuver. (FM 3-09) Fires must be cleared to prevent inadvertent engagement of friendly elements and noncombatants. Clearance of fires requires positive action; silence is not consent. The commander can delegate coordination authority to the battle captain or FSO. The battle captain clears fires using either a staff process or control measures.

8-52. Once the commander approves the control measures, they either are embedded in automated battle command systems, or are disseminated through active or passive recognition systems. During planning and execution, the commander uses all of these means in various combinations to set the conditions for clearance of fires. Even with automated systems, clearance of fires remains a command responsibility at every level—commanders must assess the level of risks and decide to what extent they will rely on automated systems to assist in the clearance of fires. (Refer to ATPs 3-09.30 and 3-09.24 for more information.)

CLOSE AIR SUPPORT

8-53. *Close air support* (CAS) is defined as the air action by fixed- and rotary-wing aircraft against hostile targets that are in close proximity to friendly forces and that require detailed integration of each air mission with the fire and movement of those forces. (JP 3-09.3) CAS can be employed by the CAB to blunt an enemy attack; to support the momentum of the ground attack; to help set conditions for CAB and ABCT operations counterfire fight; to disrupt, delay and destroy enemy forces and reserves; or to provide cover for friendly movements. In planning CAS missions, the FSO ensures the commander understands the capabilities and limitations of CAS (for example, time windows for use, airspace coordination, ground designator requirements) and munitions minimum risk estimate distances. The FSO is also responsible for integrating and synchronizing CAS missions into the fire support plan and scheme of fires. Depending on the situation and availability of CAS assets, the CAB may be allocated CAS missions or be assigned execution responsibility for a Brigade CAS mission. More likely, however, CAS can be handed off to the CAB when the brigade has no viable target, or in response to the CAB's request for immediate air support.

PREPLANNED CLOSE AIR SUPPORT

8-54. The FC must forward CAS requests as soon as they can be forecasted. These requests for CAS normally do not include detailed timing information because of the lead-time involved. Preplanned CAS requests involve any information about planned schemes of maneuver, even general information, which can be used in the apportionment, allocation, and distribution cycle. Estimates of weapons effects needed by percentage (for example, 60 percent antiarmor and 40 percent antipersonnel), sortie time flows, peak need times, and anticipated distribution patterns are vital to preparing the air tasking order. The FC and TACP ensure the proper information is forwarded through higher echelons within the air tasking order planning cycle.

CATEGORIES OF CAS

8-55. Preplanned CAS may be categorized as follows:

- **Scheduled Mission.** CAS strike on a planned target at a planned time.
- **Alert Mission.** CAS strike on a planned target or target area to be executed when requested by the supported unit. Alert missions can be accomplished via ground alert CAS, which is launched from a ground alert status upon request or order; or via airborne on-call CAS, which is comprised of designated airborne fixed wing assets pre-positioned for rapid response. Alert (on-call) CAS allows the ground commander to designate a general target area within which targets may need to be attacked. The ground commander designates a conditional period within which he later determines specific times for attacking the targets.

REQUEST CHANNELS

8-56. There are specific request channels for preplanned CAS. Within the CAB, requests for preplanned tactical air support missions are submitted to the FC. The commander, FSO, ALO, and S-3 evaluate the request; coordinate requirements such as airspace; consolidate; and, if approved, assign a priority or precedence to the request. The request then flows to BCT and division FCs to the supporting USAF ASOC.

8-57. Preplanned targets may be diverted to higher priority targets. For this reason, the FSO should plan options for the engagement of CAS targets by other fire support assets.

IMMEDIATE CLOSE AIR SUPPORT

8-58. Immediate requests are used for air support mission requirements identified too late to be included in the current air tasking order. Those requests initiated below battalion level are forwarded to the CAB FC. At battalion level, the commander, FSO, TACP, and S-3 consider each request. Approved requests are transmitted by the TACP over the Air Force air request net (See Figure 8-1.) directly to the ASOC, normally collocated with the division CP. The TACP at each intermediate headquarters monitors and acknowledges receipt of the request. Silence by an intermediate TACP indicates approval by the associated

headquarters unless disapproval is transmitted. Meanwhile, intermediate TACPs pass the request to the associated headquarters S-3 for action and coordination. All echelons coordinate simultaneously.

8-59. If any Army echelon above the initiating level disapproves a request or substitutes another support means (for example, Army aviation or field artillery), the TACP at that headquarters notifies the ASOC at division and the originating TACP, which notifies the requester. When the division commander or his representative approves the request, the ASOC initiates the necessary action to satisfy the request. If all distributed sorties are committed, the corps commander can request additional sorties from the next higher echelon, when appropriate. If the ASOC has no CAS missions available, it can, with Army concurrence, divert sorties from lower priority targets or request support from lateral or higher commands.

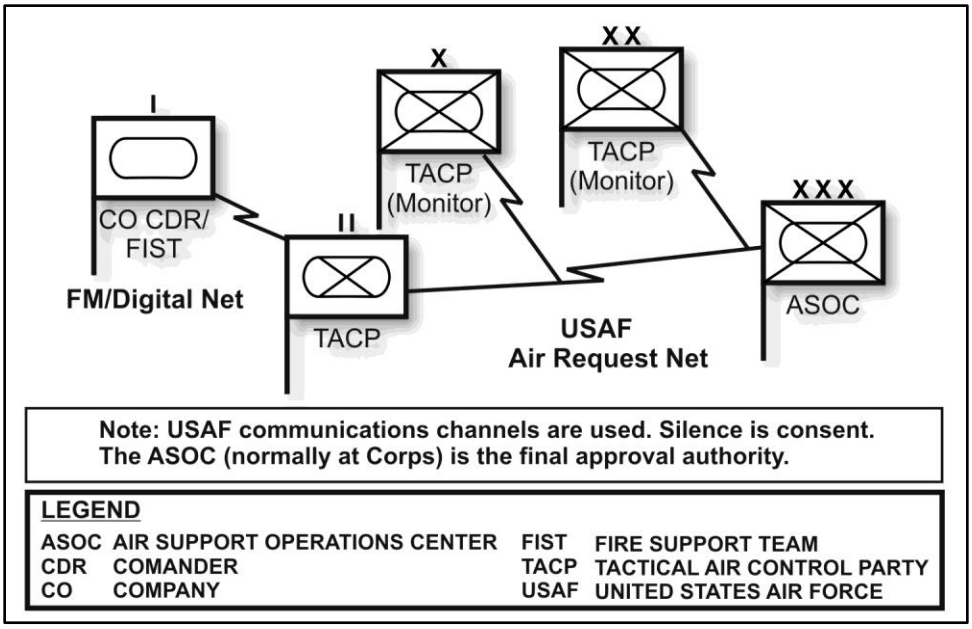

Figure 8-1. Immediate CAS request channels

JOINT FIRES OBSERVER

8-60. Joint fires observers are qualified and certified Soldiers, who can request, adjust, and control surface-to-surface fires, provide targeting information in support of Type 2 and 3 CAS terminal attack controls, and perform autonomous terminal guidance operations. The joint fires observer is not an additional position within an organization but rather an individual who has received the necessary qualification and certification. Within the CAB, Soldiers typically trained as joint fires observers include:

- Company FSOs and Fire support NCOs.
- Infantry platoon FOs.
- Scout platoon members.

CLOSE AIR SUPPORT EXECUTION CONSIDERATIONS

8-61. The BCTs have an organic air defense airspace management (ADAM)/BAE that is composed of air defense artillery (ADA) and aviation personnel and performs the airspace control integration function for the brigade in addition to its air and missile defense and aviation functions. While other members of the brigade staff are key airspace control members (fires cell, ALO/TACP, unmanned aircraft operators) The ADAM/BAE is the airspace control–integrator for the S-3, operations. They exercise the brigade commander's authority over the airspace in his AO for airspace users, to include CAS in support of ABCT operations. The CAB TACP ALO and JTAC coordinate CAS through the ABCT FC unless immediate CAS is required as discussed above.

FRATRICIDE AVOIDANCE

8-62. The safety of ground forces is a major concern during day and night CAS operations. Most engagements that result in fratricide are caused by the incorrect identification of friendly troops operating in an AO. The use of proper authentication and ground marking procedures assures that a safe separation exists between the friendly forces and the impact area of aerial delivered munitions. Proper radio procedures and markings assist the JTACs and the strike aircraft in the positive identification of ground forces and the boundaries in which they operate.

Identification of Friendly Forces

8-63. FBCB2 provides digital data on the location and identity of friendly units to enhance safety margins and reduce the potential of fratricidal engagements. Friendly unit locations and boundaries can also be marked using flash mirrors, marker panels, and direction and distance from prominent land features or target marks. Strobe lights are very good markers at night and in overcast conditions. They can be used with blue or infrared filters and can be made directional using any opaque tube. Any light that can be filtered or covered and uncovered can be used for signaling aircraft or marking friendly locations.

Target Acquisition

8-64. Targets that are well camouflaged, small and stationary, or masked by hills or other natural terrain are difficult for fast-moving aircraft to detect. Marking rounds (rockets) fired from aerial platforms or artillery can enhance target acquisition and help ensure first-pass success.

Target Identification

8-65. Strike aircraft must have a precise description of the target and know the location of friendly forces in relation to terrain features that are easily visible from the air. Airborne FACs can assist JTACs, since they have a better view due to their altitude and may have flown over the general area many times.

Final Attack Heading

8-66. Choice of the final attack heading depends upon considerations of troop safety, aircraft survivability, enemy air defense locations, and optimum weapons effects. Missiles or bombs are effective from any angle. Cannons, however, are more effective against the sides and rears of armored vehicles.

SUPPRESSION OF ENEMY AIR DEFENSES

8-67. SEAD operations target all known or suspected enemy AMD sites that cannot be avoided and that are capable of engaging friendly air assets and systems, including suppressive fires. The FC integrates SEAD fires into an overall fire plan. Synchronization of SEAD fires with the maneuver plan is accomplished using procedural control (an H-hour sequence), positive control (initiating fires on each target as the lead aerial platforms pass a predetermined reference point or trigger), or a combination of the two. Regardless of the technique, the FSO planning the SEAD must conduct detailed planning and close coordination with the S-2, S-3, ALO, Army aviation LNO, and field artillery battalion S-3/fire direction officer.

WEATHER

8-68. Weather is one of the most important considerations when conducting Unified Land Operations. Weather impacts all the warfighting functions, and can hinder target acquisition and identification, degrade weapon accuracy and effectiveness, or negate employment of specific munitions types. The S-3 requests weather data from the Division Staff Weather Officer to gain highly predictive and descriptive weather information for specific time periods and locations within the CAB's AO. This data improves his ability to determine when friendly and enemy capabilities will be impacted by weather. In addition, the weather program of record (that is DCGS-A) provides weather data from the Air Force Weather Agency and meteorological sensors throughout the AO. This system interfaces with the ABCS systems and disseminates weather information down to CAB level. The weather program of record can predict weather

effects on a specific mission, desired AO, or particular system. The system also provides weather hazards and forecasts for different locations, as well as current and forecast weather conditions for visibility, wind, precipitation, cloud cover, temperature, humidity, and atmospheric pressure in a specific AO. Meteorological satellite data may also be obtained to show regional cloud cover and precipitation.

SECTION II – AVIATION

8-69. Army aviation uses maneuver to concentrate and sustain combat power at critical times and places to find, fix, and destroy threat forces. Aviation units design, tailor, and configure their assets in support of the company team for specific operational support based on mission guidance and the specific theater in which the units operate. The organization could be any combination of attack reconnaissance, assault, lift, and maintenance units. When providing support to ground maneuver elements, Army aviation will operate on that echelon's command net unless directed otherwise.

8-70. The principles and guidelines for employment of aviation assets are as follows:

- Fight as an integral part of the combined arms team.
- Exploit the capabilities of other branches and services.
- Capitalize on information collection capabilities.
- Suppress threat weapons and acquisition means.
- Exploit firepower, mobility, and surprise.
- Mass forces.
- Use terrain for survivability.
- Displace forward elements frequently.
- Maintain flexibility.
- Exercise staying power.

AIR/GROUND OPERATION

8-71. The operational environment requires combined arms at all levels; therefore, the likelihood of CAB commander receiving attack and utility aviation assets in an operational control status is ever increasing. The following are considerations for the commander and staff when receiving aviation assets:

- Exchange of command frequencies/call signs, frequency modulation check-in times, and synchronization.
- Terrain model and radio rehearsals, along with conducting regular training events.
- Location of air corridors and air control points.
- Location of aerial attack-by-fire/support-by-fire/BPs.
- Identification method for marking ground targets and SOPs.
- Aircraft weapons configuration capabilities and limitations of each force.
- Friendly recognition symbols for both aircraft and ground vehicles.
- Fire coordination measures.
- Location and marking of LZs and pickup zones (PZs) for medical evacuation, CASEVAC, and aerial resupply.
- Command and support relationship.

8-72. Ground maneuver commanders must understand that aviation forces can provide a significant advantage during operations. The commander and staff must understand that the unique capabilities of Army aviation require unique planning and coordination. The MDMP and TLP must fully integrate Army aviation forces to ensure effective combined arms employment. Effective combined arms employment requires that aviation and ground maneuver forces synchronize their operations by operating from a common perspective. This section highlights some possible procedures that aid in creating a common air-ground perspective.

CLOSE COMBAT ATTACK

8-73. When the CAB engages in CCA on the battlefield, it may request CCA support. Close combat attack as a hasty or deliberate attack by Army aircraft providing air-to-ground fires for friendly units engaged in close combat as part of the Army combined arms team. Due to the close proximity of friendly forces, detailed integration is required. Due to the capabilities of the aircraft and the enhanced situational awareness of the aircrews, terminal control from ground units or controllers is not necessary. *CCA is not synonymous with CAS.*

8-74. In most cases, Army attack reconnaissance helicopters are either employed by a preplanned mission or on an immediate or emergency basis. Attack reconnaissance aircraft engage targets near friendly forces, thereby requiring detailed integration of fire and maneuver of ground and aviation forces. To achieve desired effects and reduce risk of fratricide, air/ground operation must take place down to team levels. Both types of CCA represent a powerful battlefield asset, capable of destroying threat elements of varying sizes, including large Armor formations and during counter-insurgency operations in urban terrain. Most aspects of CCA employment and target effects are similar to those for CAS that fixed-wing aircraft provide.

EMPLOYMENT CONSIDERATIONS

8-75. Mission success in CCA employment is dependent on leaders conducting detailed planning and coordination between the aerial attack team and the ground unit already engaged in close combat. Once execution begins, there must be effective integration of the fires and movement of both maneuver and aerial elements. (Refer to ATP 3-04.14 for more information.)

Planning and Reconnaissance

8-76. Planning for attack reconnaissance helicopter support usually begins at squadron/battalion level or above. The squadron/battalion provides the aviation brigade or CAB with information on locations, routes, and communications before the attack team's departure from its assembly area. As part of this effort, the company team and platoons usually provide information for CCA employment. All Soldiers should familiarize themselves with the procedures used to call for attack reconnaissance helicopter support. If attack reconnaissance helicopter assets are working for the battalion, they must provide suppressive fires on any known or suspected threat air defense artillery locations.

8-77. Critical elements of the planning process are the procedures and resources used in marking and identifying targets and friendly positions. Leaders consider these factors thoroughly, regardless of the time available to the ground and air commanders.

Coordination

8-78. The aerial attack team coordinates directly with the lowest-level unit in contact on the company team command net. Whenever practical, before the attack team launches the CCA operation, the ground leader conducts final coordination with attack reconnaissance helicopters in a concealed position known as the aerial holding area. The holding area is a point in space within the supported unit's AO that is oriented toward the threat; it allows the attack team to receive requests for immediate CCA and expedite the attack. The aerial holding area could be an alternate BP positioned out of range of the threat's direct fire and indirect fire weapons ranges.

8-79. Final coordination between the ground and aviation units must include agreement on methods of identifying and marking friendly and threat positions. This should take advantage of the equipment and capabilities of the attack team, including the Forward-Looking Infrared System, the Thermal Imaging System, and night-vision devices.

8-80. Coordination should cover the BPs, attack-by-fire, or support-by-fire positions used by attack reconnaissance helicopters. The commander should offset these positions from the ground maneuver unit to maximize the effects of the attack team's weapons and to minimize the risk of fratricide. To prevent indirect fires within the AO from posing a danger to the helicopters, the ground commander informs direct support artillery and organic mortars of the aerial positions and coordinates through the FSO and battalion fires support element for de-confliction.

AIR MOVEMENT

8-81. Air movement operations are conducted to reposition units, personnel, supplies, equipment, and other critical combat elements in support of current and future operations. These operations include both airdrops and air landings.

8-82. Planning for air movements is similar to that for other missions. Besides the normal planning process, air movement planning must cover specific requirements for air infiltration and exfiltration. The requirements are as follows:

- Coordinate with the supporting aviation unit(s).
- Plan and rehearse with the supporting aviation unit prior to the mission if possible. If armed escort accompanies the operation, the commander—as well as the assault or general support aviation unit—should ensure that aircrews are included in the planning and rehearsal.
- Gather as much information as possible, such as the enemy situation, in preparation for the mission.
- Plan and coordinate joint suppression of enemy air defenses.

8-83. The unit should plan different ingress and egress routes, covering the following:

- Planned insertion and extraction points.
- Emergency extraction rally points.
- Lost communications extraction points.

8-84. Planned extraction points and emergency extraction rally points require communications to verify the preplanned pickup time or coordinate an emergency pickup time window. Planning must include details for extraction when communications between higher headquarters and the unit are lost. The lost communications extraction point involves infiltration teams moving to the emergency extraction point after two consecutive missed communications windows and waiting up to 24 hours for pickup.

AIR RESUPPLY

8-85. Units may operate in forward locations and even distant hide positions requiring helicopter resupply including both internal and external load operations.

PLANNING

8-86. Planning for aerial resupply requires close coordination, with elements reviewing the entire mission and resolving all limitations and problem areas. If a resupply item poses a problem that cannot be resolved, leaders should consider another mode of transport. Planning factors include the following:

- Priorities of cargo/unit resupply.
- Integration of the resupply operation into the tactical plan.
- Selection, identification, and marking of the PZ/LZ.
- Type/amount of cargo.
- Helicopter assets available.
- Requirements for slings, cargo nets, and cargo containers.
- Ground crew-training requirements; such as those for ground guides and hookup personnel.
- PZ and LZ security.
- Flight routes.

8-87. The selection of a usable PZ or LZ is extremely important. The commander analyzes logistical and tactical considerations taking into account that PZ/LZ positioning is at the right place to support the ground unit. The area must be accessible to the aircraft involved in the resupply operation. The air mission commander, the pilot in command, an aviation liaison officer, or a Pathfinder-qualified officer or NCO make the final decision on PZ/LZ selection and acceptance.

8-88. The unit receiving the supplies is responsible for preparing the PZ/LZ. Besides the general PZ/LZ responsibilities, they perform the following specific tasks for aerial resupply:

- Recover and assemble equipment and supplies.

- Train available ground crews to guide the aircraft during approach, landing, unloading/loading, departure, and de-rigging the load.
- Train hookup personnel.
- Coordinate with the sending unit for the control and return of that unit's transport equipment, such as slings and A-22 bags.
- Prepare, coordinate, and inspect backloads (such as slings and A-22 bags) and have them ready for hookup or loading when the aircraft arrives.

SECTION III – PROTECTION

8-89. The protection warfighting function is the preservation of the effectiveness of mission-related military and nonmilitary personnel, equipment, facilities, information, and infrastructure deployed or located within or outside the boundaries of a given operational area. Preserving the force includes protecting personnel (combatants and noncombatants) and physical assets of the United States and multinational military and civilian partners, to include the host nation. The protection warfighting function enables the commander to maintain the force's integrity and combat power. Protection determines the degree to which potential threats can disrupt operations and then counters or mitigates those threats. Protection is a continuing activity; it integrates all protection capabilities to safeguard bases, secure routes, and protect forces. (Refer to ADRP 3-37 for more information.)

8-90. Units must consider the twelve protection functions identified in ADRP 3-37. The following Protection tasks are discussed below. Others are covered in other chapters throughout this ATP:

- Coordinate air and missile defense.
- Implement OPSEC
- Conduct chemical, biological, radiological, and nuclear operations.

COORDINATE AIR AND MISSILE DEFENSE OPERATIONS

8-91. The CAB has no organic air defense assets, but the BCT has an ADAM/BAE section with an air and missile defense workstation. Air and missile defense workstation is the mission command component of the AMD planning and control system. It is the staff planning and situational awareness tool used to integrate sensors (for example, Sentinel radar) with air defense fire units. Based on METT-TC, divisions may locate ADA units well forward in the area of operations. A short-range air defense platoon may be in direct support of a CAB. (Refer to ADRP 3-90 for more information.)

8-92. Air defense artillery units are a limited resource. Available ADA resources will be dedicated to the protection of assets that commanders deem critical to the success of the tactical plan, leaving other assets without dedicated ADA coverage. All units with or without dedicated ADA support must contribute to their own defense against air attack.

8-93. The battalion adopts its air defense posture based on the type of supporting air defense assets that are attached. The battalion always uses a combination of active and passive measures to protect itself against air attack.

8-94. The type of SHORAD ADA systems that the brigade and the CAB may have in their AOs are:

- Stinger man portable air defense system –a man-portable, shoulder-fired guided missile system.
- Avenger–a pedestal-mounted Stinger system mounted on a high-mobility multipurpose wheeled vehicle (HMMWV).
- Linebacker–a pedestal mounted Stinger on a BFV.
- Counter Rocket, Artillery and Mortar

THE THREAT

8-95. In analyzing the physical variable of a CAB's operational environment, planners must take into account the airspace above the CAB's AO. Some areas to consider include:

- Location of threat airfields and launching points.

- Range of aircraft and missiles.
- Physical constraints in the friendly AO.
- Buildings and other structures.
- Power lines and antennas.
- Hills, trees, and other natural barriers to movement and observation.
- Weather.

8-96. The following are some of the types of air threats and typical maneuvers that the CAB can expect to encounter against a well-equipped enemy:

- Unmaned aerial vehicles (UAV's)are small and elusive. They usually fly low, but the altitude can vary. Once in the target area, they may fly an orbit attempting to stay out of engagement range of ADA.
- Most surface-launched cruise missiles follow the terrain and use terrain masking. Due to their range, they might take indirect approach routes.
- Ballistic missiles are not terrain-dependent. They fly from launch point to objective. Their flight is not restricted by terrain.
- Tactical air-to-surface missiles usually fly direct routes from launch platform to the target.
- Rotary-wing aircraft primarily conduct contour flights. They follow ridgelines and military crests, using the terrain to mask their approach to the target area.
- Fixed-wing aircraft usually follow major terrain or man-made features. Depending on range, they may fly a straight line to the target.
- Ordnance or payload can affect range and altitude of the air system and, thus, influence the selection of avenues of approach for airborne and air assault operations.

8-97. Units can expect the threat to attempt to counter U.S. defensive and offensive operations with a myriad of aerial platforms. UAS provide the threat commander the necessary information to determine friendly unit locations, movements, and objectives. Aerial and artillery strikes can be generated from the intelligence gathered against the following targets:

- Maneuver force.
- Forward arming and refueling points.
- Aviation bases.
- Command and control nodes.
- Reserve troop concentrations.
- Forward support company areas.
- Terrain features.
- Obstacles constricting unit movements as U.S. forces advance to close with the enemy forces.

8-98. Lethal UAS can be effective in disabling command, control, communications, and intelligence facilities or destroying armored vehicles. The threat probably will use cruise missiles against logistical concentration, C2 nodes, or with submunitions for area denial. It probably will use rotary wing aircraft to attack forward elements and the flanks of the advancing enemy maneuver force to slow their tempo, cause confusion and, thereby, inflict maximum casualties. Rotary wing aircraft also can be used to conduct operations across FLOT, CAS, and air insertion operations. Armed attack helicopters constitute the most widespread and capable air threats to friendly ground forces in the close battle.

PASSIVE AIR DEFENSE

8-99. Soldiers use passive air defense measures to avoid detection from enemy air attack. Passive air defense is all measures, other than active air defense, taken to minimize the effectiveness of hostile air and missile threats against friendly forces and assets. These measures include camouflage, concealment, deception, dispersion, reconstitution, redundancy, detection and warning systems, and the use of protective construction. (JP 3-01) Concealing large vehicles like the Abrams tank and BFV is difficult. Commanders should consider deception techniques to disguise their intentions and active air defense.

Damage-Limiting Measures

8-100. Damage-limiting measures are attempts to limit any damages should the enemy detect friendly forces. These measures are used when units are in a static position such as an assembly area, or when they are maneuvering. If caught in the open, personnel should immediately execute battle drills and move to positions of cover and concealment that reduce the enemy's ability to acquire or engage them. The same measures taken to limit damage from artillery attack are used for dispersion, protective construction, and cover. Examples of damage-limiting measures include vehicle dispersion, camouflage, and dug-in fighting positions with overhead protection.

ACTIVE AIR DEFENSE

8-101. Although passive measures are the first line of defense against air attack, troops must be prepared to engage attacking enemy aircraft. The decision to fight an air threat is based on the immediate situation and weapons system capabilities. Based on the mission, companies do not typically engage aircraft except for self-preservation or as directed by the battalion or company commander.

Engagement Techniques

8-102. The crew's goal is to engage and destroy or suppress targets as fast as possible. Basic engagement procedures used for all engagements include:

- The vehicle commander might be required to lay the gun for direction if the gunner's scan is away from the target. He will release control to the gunner (target hand-off) and issue the fire command.
- Once the target is acquired, the gunner identifies and discriminates the target.
- The vehicle commander then confirms the target and gives the fire command.
- The gunner completes his switch checks.

Aircraft Engagement Techniques for Tanks

8-103. Tank automatic weapons can be used effectively against UAS, jets, and helicopters especially when several tanks are firing at the same time. The tank main gun can be used with good results against helicopters. It cannot be used effectively against jets because of the difficulty of tracking high-speed targets.

8-104. Engage hostile helicopters and UAS immediately with the tank commander's M2 or the loader's M240B machine gun. Firing quickly will—

- Alert other tanks that hostile targets are in the area.
- Destroy the target or spoil the pilot's aim.
- Give the tank commander time to engage the target with the main gun and coaxial, if desired.

8-105. The tank commander's and loader's machine guns are useful weapons against unarmored threats. They can be fired quickly with volume fire. Before firing, ensure that the firing fan is clear of friendly units. Use the following guidelines:

- When the targets is hovering or inbound, aim high with the machine gun and fire a continuous burst, adjusting onto target by observing the tracers. Remember, at longer ranges tracers may appear to be striking the target when they are actually going under it.
- If the target is moving, track along its flight path using a lead of 50 meters (half a football field). Fire a continuous burst, forcing the target to fly through the cone of fire.

8-106. The tank main gun should be used against armored threat helicopters. If an attack helicopter is hovering, it is probably preparing to fire a missile. Time is essential; fire any round that is battle-carried. The M830A1 multipurpose antitank round is, by design, the most accurate round for engaging helicopters and should be the next round fired after any preloaded round. When engaging moving helicopters with an M1-series tank, smoothly track the target while aiming at the center of mass. Lase to the target, wait for the automatic lead to be induced (about 2 seconds), and fire. Be prepared to fire a second round using the same technique used for the first round.

8-107. Because of the high speed of jet aircraft, the best technique to use against them is to fire all tank automatic weapons in continuous bursts. If the jets are inbound, aim slightly above the nose or fuselage and fire. If the jet is crossing, use a lead of 200 meters (two football fields) and fire, letting the jet fly through the cone of fire from the machine guns. Do not try to track or traverse your fire with the jet–it flies too fast.

Smalls Arms Used for Air Defense

8-108. Small arms used for air defense incorporate the use of volume fire and proper aiming points according to the target. The key to success in engaging enemy air is to put out a high volume of fire. All weapons designated by the commander should be used, including M2s, mounted on tracks and trucks, and Infantry direct fire automatic weapons. The commander must decide whether to engage and must provide the engagement command for the entire unit to fire upon the attacking aircraft rather than having Soldiers fire at the aircraft individually.

AIR DEFENSE WARNINGS AND WEAPONS CONTROL STATUS

8-109. Battalion leaders should ensure their subordinates understand the air threat and air threat warning conditions. Air defense conditions are stated in the OPORD:

- **Red.** Indicates the attack is imminent.
- **Yellow.** Indicates that an attack is probable.
- **White.** Indicates that an attack is not likely.

8-110. A local air defense warning describes the air threat in the immediate area. Local air defense warnings are designed to alert a particular unit, several units, or an area of the battlefield of an impending air attack. Air defense units use local air defense warning s to alert Army units about the state of the air threat in terms of "right here and right now." They can be used in conjunction with air defense warnings established by higher headquarters. Examples of local air defense warning s are described below:

- **Dynamite.** Indicates an attack is imminent or in progress.
- **Lookout.** Indicates an attack is likely.
- **Snowman.** Indicates an attack is not likely.

8-111. Weapons control status determines the conditions for using weapons against enemy aircraft:

- **Weapons Free.** Enemy air is probable, and Soldiers may fire at aircraft not positively identified as friendly.
- **Weapons Tight.** Enemy air is possible, and Soldiers may fire only at aircraft positively identified as hostile according to announced hostile criteria.
- **Weapons Hold.** Enemy air is not likely, and Soldiers may not fire except in self-defense.

IMPLEMENT OPSEC

8-112. To accomplish the assigned mission, the CAB commander must integrate and synchronize all warfighting functions as enablers to enhance the combat power of his maneuver companies. OPSEC is a critical element that applies to all operations across the range of military operations. Listed below are areas that the CAB commander may need to consider when performing OPSEC.

INFORMATION PROTECTION

8-113. Information protection refers to active or passive measures that protect and defend friendly information and information systems to ensure timely, accurate, and relevant friendly information. It denies enemies, adversaries, and others the opportunity to exploit friendly information and information systems for their own purposes. (ADRP 3-0) The S-6 leads the staff's efforts to protect the CAB's mission command systems. There are six primary means to attack information systems:

- Unauthorized access.
- Malicious software.
- Electromagnetic deception.

- Electronic attack.
- Physical destruction.
- Propaganda.

8-114. Capabilities used to conduct information protection operations include:

- Information protection.
- Computer network defense.
- Electronic protection.
- Information assurance.
- Physical security.
- Operation security.

COMPUTER NETWORK DEFENSE

8-115. Computer network defense (CND) are actions that the CAB takes through the use of computer networks to protect, monitor, analyze, detect, and respond to unauthorized activity within DoD information systems and computer networks. CND includes all measures that detect unauthorized network activity and adversarial computer network attack; and all measures that defend computers and networks against unauthorized and adversarial network activities. Such measures include access controls, malicious computer code and program detection, and intrusion-detection tools.

8-116. External and internal information perimeter protection prevents unknown users or data from entering a network. External efforts include communications security; router filtering and access control lists; and security guards. Where necessary, units physically isolate or place barriers between protected and unprotected networks. Internal perimeter protection consists of firewalls and router filters. These serve as barriers between echelons or functional communities.

8-117. To defend computer networks from unauthorized activity, the CAB uses its inherent capabilities to conduct CND. CND includes any responses to stop or minimize the effects of unauthorized activity. These include:

- Establishing protective measures within computer networks through network management and information assurance procedures, tools, and trained personnel.
- Compiling and safeguarding information for tracking, apprehending and prosecuting perpetrators of unauthorized activity.
- Incorporating intrusion software into networks.
- Establishing firewalls.
- Increasing awareness training, including information from the S-2 on CND threats.

ELECTRONIC PROTECTION

8-118. Electronic protection is the division of electronic warfare involving actions taken to protect personnel, facilities, and equipment from any effects of friendly or enemy use of the electromagnetic spectrum that degrade, neutralize, or destroy friendly combat capability. (JP 3-13.1) The role of electronic protection in operations is to protect the electromagnetic spectrum for use by friendly forces. The CAB accomplishes this by taking passive and active actions to protect personnel, facilities, and equipment from the effects of both friendly and enemy electronic warfare.

8-119. Examples of electronic protection include:

- Spectrum management and deconfliction of electromagnetic spectrum frequencies used by friendly information systems to reduce interference and ensure that information systems operate effectively.
- Electromagnetic hardening of facilities and equipment against known enemy and friendly electronic attack systems to reduce damage to friendly information systems.
- Emission control procedures for friendly systems to reduce potential interference and the likelihood of detection and exploitation.

8-120. Equipment and procedures designed to prevent adversary disruption or exploitation of the electromagnetic spectrum are the best means that friendly forces have to protect and ensure their own uninterrupted use of the electromagnetic spectrum during operations. In addition to equipment hardening and control of emissions, it is vital that the S-6, S-2, coordinate closely to ensure proper deconfliction of EW activities with friendly information systems and intelligence operation activities supporting an operation.

Radio Transmissions

8-121. Nonsecure radio transmissions should be brief to reduce the EW signature. Using secure operational and numerical codes (frequency hopping) reduces the chance of enemy detection. When feasible, use low-power transmissions and terrain to mask signals from enemy direction-finding equipment. Use couriers, wire, tactical Internet, VOIP telephones, and ABCS for lengthy messages. Units must practice the discipline of using signal operations instructions, proper operational terms, and unit TACSOPs to protect operational information.

CONDUCT CBRN OPERATIONS

8-122. Threat forces will seek opportunities to employ weapons of mass destruction to inflict a large number of casualties, slow U.S. forces and unified action partners advancement, and test their resolve. They will target friendly urban centers, initial entry points, aerial ports of debarkation, and seaports of debarkation. The hybrid threat will conduct unconventional tactics such as contaminating fuel or water sources. U.S. forces and unified action partners should be prepared to implement protective measures, enhance survivability, and provide timely information to higher headquarters should a CBRN attack occur.

PRINCIPLES OF CBRN DEFENSE

8-123. CBRN operations are conducted pre-incident (CBRN active defense) and post incident (passive defense). CAB should execute active and passive defense principles to minimize or negate the effects of CBRN attacks A combination of these measures reduces the enemies capability to deliver CBRN weapons and the effects of those weapons if successfully delivered.

CBRN Active Defense

8-124. Successful information collection and intelligence operations are critical to employing active defense measures, which include missile and air defense, special and security operations. The CAB can—

- Destroy CBRN-capable artillery battery by coordinating counterbattery fires.
- Destroy munitions on vehicles or caches before they are delivered.
- Detect planned terrorist actions involving CBRN weapons

CBRN Passive Defense

8-125. Passive defense measures include actions taken to minimize the effects or vulnerability to CBRN attacks:

- Avoidance of CBRN hazards.
- Protection of individuals, units and equipment from unavoidable CBRN hazards.
- Decontamination to restore missioncapability.

Avoidance

8-126. The best defense against CBRN weapons is using the fundamental principles of contamination avoidance. Avoid the hazard by deterring or preventing it from being released in the first place; or know exactly where, what, and how much contamination is present in the area of operation and avoid entering it unless it is vital to mission success. Successful contamination avoidance prevents disruption to operations and organizations by minimizing unnecessary time in cumbersome protective postures and by minimizing decontamination requirements. Successful avoidance may be achieved by bypassing contamination or calculating the best time to cross contaminated areas using the procedures described in this manual.

Avoiding contamination requires the ability to recognize the presence or absence of CBRN hazards in the air; on water, land, personnel, equipment, and facilities; and at short and long ranges.

Protection

8-127. CBRN protection is an integral part of operations. Techniques that work for avoidance also work for protection, such as shielding Soldiers and units and shaping the battlefield. Activities that comprise protection involve sealing or hardening positions, protecting Soldiers, assuming mission-oriented protective posture (MOPP), reacting to attack, and using collective protection.

8-128. The Abrams tank provides its crew protection CBRN contamination because it is equipped with a gas particulate filter system. It is also equipped sensors such as radiological and chemical point detectors that warns the crew that hazards are present. The crew can then decide to either leave the contaminated area or prepare to operate within the contaminated environment, i.e conduct the isolation of an objective in a cordon and search.

Decontamination

8-129. If contamination avoidance is not possible, personnel and equipment must be decontaminated to reduce or eliminate the hazard. CBRN decontamination prevents the erosion of combat power and reduces possible casualties resulting from inadvertent exposure or failure of protection. Decontamination allows commanders to sustain combat operations. Decontamination principles involve conducting decontamination as quickly as possible, decontaminating only what is necessary, decontaminating as far forward as possible, and decontaminating by priority. (Refer to FM 3-11 for more information.)

SECTION IV – ENGINEER OPERATIONS

8-130. Engineers support CABs with combat, general, and geospatial engineer support. The focus of combat engineers is on executing engineer-related mobility, countermobility, and survivability (M/CM/S) tasks. The CAB uses engineers to shape the AO by providing freedom of maneuver for friendly forces, denying movement to the enemy, and protecting friendly forces from the effects of enemy weapons systems. The CAB must fully integrate combat engineers into the battalion.

8-131. The TF engineer recommends engineer-related M/CM/S tasks and supports the CAB staff as the staff lead for the integration of these tasks while it plans operations throughout the battalion's AO. In addition, the TF engineer ensures that the staff integrates all military and civilian engineer efforts within the battalion's AO. That includes the following:

- Mobility operations preserve friendly force freedom of maneuver. Mobility missions include breaching, and clearing obstacles, maintaining battlefield circulation, providing gap crossing, and identifying routes around contaminated areas.
- Countermobility denies mobility to enemy forces. It limits the maneuver of enemy forces and enhances the effectiveness of fires. Countermobility missions include the creation and integration of obstacles and, potentially, the use of obscurants.
- Survivability operations protect friendly forces, equipment, and supplies from the effects of enemy weapons systems and from natural occurrences. Hardening of facilities and the fortification of battle positions are active survivability measures. CBRN passive defensive measures are included in survivability operations.

ESSENTIAL TASKS FOR MOBILITY, COUNTERMOBILITY, AND SURVIVABILITY

8-132. An essential task for M/CM/S is a specified or implied task that is critical to mission success. Most of these will be engineer-related, but not all of them. Ultimately, an essential task for M/CM/S enables the CAB's main effort to achieve its task and purpose. It can be accomplished directly in support of the main effort or one of the CAB's shaping operations. Identification of the essential tasks helps to focus the

development of plans, staff coordination, and allocation of resources. Failure to achieve an essential task for M/CM/S could require the commander to alter his tactical or operational plan.

8-133. A fully developed essential task for M/CM/S has a task, purpose, method, and effects. The task describes what objective the unit must achieve to support friendly formations, or what it will do to an enemy formation's function or capability. The purpose describes why the task contributes to maneuver and is nested with the maneuver task and purposes. The method describes how the task will be accomplished by assigning responsibility to maneuver units, supporting units, or delivery assets and by providing amplifying information or restrictions. The effect is the general narrative of what the commander wants to happen.

8-134. The approved essential tasks for M/CM/S are described in the concept of operations paragraph within the base order. The concept of operations includes the logical sequence of essential tasks for M/CM/S that, when integrated with the scheme of maneuver, will accomplish the mission and achieve the commander's intent. The scheme of engineer operations describes the detailed, logical sequence of all engineer-related tasks within the CAB's M/CM/S operations; general engineer tasks; obscuration, and geospatial engineering tasks; and their impact on friendly and enemy units. It also details how the supporting engineers are to accomplish the commander's essential tasks for M/CM/S.

ENGINEER SUPPORT

8-135. The CAB should expect to receive an engineer attachment for most combat operations. The organizational structure of this engineer attachment is dependent upon whether or not the ABCT has a BEB or a BSTB. (Refer to FM 3-96 for more information.)

8-136. The ABCT may receive additional engineer units to provide additional capability similar to its organic engineer companies in the BEB or the BSTB with a combat engineer company as well as specialized additional breaching, clearing, or gap crossing capabilities and equipment. Priority of engineer support from the BEB or the engineer company in the BSTB is typically to mobility, although it may rapidly change to countermobility in anticipation of an enemy attack The CAB can expect to receive some of the engineer augmentation received by the ABCT. (See Table 8-5.)

8-137. It is critical that supporting and supported elements understand their support relationships. The factors of METT-TC help to determine whether OPCON or tactical control. Distance and time are a key factor in determining the Engineer's company ability to support its subordinates. When operating in large AOs attaching units is the most likely COA, requiring the supported unit and FSC to provide the logistical support required for the engineer augmentation. The Engineer company does not have an organic maintenance team, so requesting and planning for additional maintenance capability must also be considered.

Table 8-5. Typical potential engineer augmentation for a CAB

Unit Name	Mission	Capabilities/Planning Factors
Clearance Company	Conduct detection and neutralization of explosive hazards EHs.	• Clears a total of 255 km of two-way route per day (three routes of 85 km each). • Clears a total of 2 acres (8093 sq m) per day (two areas at 1 acre each).
Engineer Mine Dog Detachment	Perform EH search and detection in support of route and area clearance.	• Detects metallic and nonmetallic mines (both buried and surface-laid) and other EHs. • Conducts minefield extraction, combat patrols, building search (disruptive and non-disruptive), vehicle search, and cave clearance. • Searches open areas, fields, woods, hedgerows, and embankments. • Proofs along roads, tracks, and railways.
Sapper Company	Execute M/CM/S tasks and provide support to general engineering missions	• Execute 120 km of combat route clearance per day. • Execute 6 dismounted or urban breach lanes. • Execute 3 mounted breach lanes. • Improve lanes and marking in the ABCT AO. • Employ engineer units to emplace bridges. • Receive and analyze Ground Standoff Mine Detection System (GSTAMIDS)/Airborne Standoff Mine Detection System

		(ASTAMIDS) data from other units. • Provide 660 man-hours/day for general construction labor in support of vertical and horizontal construction.
Mobility Augmentation Company (MAC)	Conduct assault gap crossings; mounted and dismounted breaches. Emplaces obstacles in support of maneuver units.	• Enable an ABCT to conduct 4 assault gap crossings. • Enable an ABCT to conduct 2 mounted breaches. • Enable an ABCT to conduct 4 additional dismounted breaches. • Emplace 4432 linear meters of fix/disrupt tactical obstacle frontage without reload. • Employ 2 breach platoons to execute route clearance operations.

EXPLOSIVE ORDNANCE DISPOSAL

8-138. The CAB usually requires EOD support for destruction of ammunition, and rendering safe of explosive ordnance. EOD core competencies include:

- Ammunition and explosive safety (functioning, recovery and disposal).
- Explosive ordnance and hazards (explosive remnants of war).
- Captured enemy munitions.
- EO technical information, which includes:
  - Electronic counter measures.
  - Counter radio-controlled IED electronic warfare.
  - Frequency exploitation capability.
- CBRN and explosive treats and hazards.

8-139. EOD capabilities are not organic to the BCT. Usually, one EOD company is attached to each deployed BCT. Explosive hazard SPOTREPs are processed through S-3 channels to the BCT assured mobility section, who then forwards the request to the supporting EOD headquarters. Once explosive ordnance is located and reported, the EOD headquarters determines what EOD assets will respond. Typical EOD assets in the BCT AO include:

- EOD response team, which includes:
  - 2-3 Soldiers.
  - Smallest EOD maneuver element.
  - Organized as a combined arms explosive ordnance response unit (augmented by security teams).
- EOD platoon, which includes:
  - 7-9 Soldiers (based upon 2-3 Soldier response teams).
  - Smallest EOD deployable element.
  - Organized as a battalion/company combined arms explosive ordnance response platoon (augmented by security element).

SECTION V – INFORMATION OPERATIONS

8-140. Unified land operations require effective commanders to consider what will affect the operational enviroment. Commanders lead information operations (IO) while considering the following: combat power, mission command, mission command system, themes and messages, information management and knowledge management, legal considerations, and intelligence support. Information operations are an integration process that assists commanders with synchronizing all information-related capabilities available to them while taking account of the above considerations into the operations plan

8-141. Information operations concept brings together several separate functions as information-related capabilities which commanders use to shape the information environment. This allows for message alignment, reinforcement, and consistency in support of the overall concept of operations rather than individual events or missions.

INFORMATION-RELATED CAPABILITIES

8-142. Information-related capabilities are capabilities that support a commander's ability to communicate across a range of operations and many audiences to inform or influence and, consequently, shape desired outcomes. Theoretically, all capabilities send a message (or make an impression) and serve to inform and influence audiences. While conducting IO, commanders consider all capabilities in devising solutions and plans. The commander and staff regularly use traditional information-related capabilities when conducting the following IO:

- Public affairs.
- Military information support operations.
- Soldier and leader engagements.
- Combat camera.
- Military deception.
- Cyber electromagnetic activities.
- Operations security

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Appendix A

Duties and Responsibilities

BATTALION COMMANDER

A-1. The CAB commander has total responsibility for the CAB and its actions. He commands all CAB units, whether organic, assigned, under OPCON, or attached. The commander plans his operations with the assistance of his staff and subordinate leaders. He leads the CAB by providing purpose and direction to accomplish the mission and by his presence and direction during operations. He increases the effectiveness of the battalion by delegating to his subordinates the authority to accomplish their missions; holding subordinates responsible for their actions; and fostering a climate of mutual trust, cooperation, and teamwork. He organizes his force based on the mission of the higher headquarters and a thorough understanding of METT-TC.

A-2. The commander's personal staff group consists of the command sergeant major (CSM) and chaplain. The commander's personal staff group can be adjusted to accommodate evolving mission requirements to include, for example, a personal security detachment, a legal advisor, or an interpreter.

COMMAND SERGEANT MAJOR

A-3. The CSM is the senior NCO in the battalion. He is responsible for providing the commander with personal, professional, and technical advice on enlisted Soldier matters and the NCO Corps as a whole. He focuses on Soldier welfare and individual training and on how well the CAB carries out the commander's decisions and policies. The CSM can act as the commander's representative in supervising aspects vital to an operation as determined by the commander. For example, he can help control movement through a breach in a critical obstacle or at a river crossing, or he can help coordinate a passage of lines or quarter assembly areas.

A-4. The CSM also plays a key role in the sustaining effort as the sustaining troubleshooter for the CAB. The CSM must be involved during the conduct of sustainment planning, rehearsals and operations (that is support rehearsals, paragraph 4 of the operations order, logistic-resupply points (LRPs), casualty collection points, maintenance collection points, ambulance exchange points (AXPs), CASEVAC rehearsals, support graphics, and so forth). The assignment of Soldiers in the CAB requires the CSM to step beyond his basic branch orientation and serve as advocate, mentor, and role model for every Soldier in the battalion.

EXECUTIVE OFFICER

A-5. The XO is the principal assistant to the battalion commander. As the second in command, the XO must be ready to assume command immediately if the commander becomes a casualty. The XO transmits the commander's intent for the battalion. His two main responsibilities are to direct the operational efforts of the staff and to sustain battalion readiness.

A-6. The XO is the commander's chief of staff. He directs, coordinates, supervises, trains, and synchronizes the work of the staff, ensuring efficient and prompt staff actions. The commander usually delegates executive management authority (equivalent to command of the staff) to the XO for the coordinating and special staff. The commander usually retains responsibility for supervising the personal staff. Staff members inform the XO of any recommendations or information they pass directly to the commander, and of instructions they receive directly from the commander.

A-7. The XO must understand the commander's intent and ensure the staff implements it. He monitors the combat status of all subordinate units, and ensures that status is provided to the commander. The XO synchronizes all the elements of combat power, including the information element, into CAB operations; the goal is to implement the commander's intent and concept of operations. The duties of the XO include:

- Management of the commander's critical information requirements (CCIRs).
- Information management within the CAB.

- Recommended organization of the staff.
- Determination of liaison requirements and supervision of LNOs.
- Supervision of work quality from and crosstalk between staff officers and sections.
- Synchronization of the staff during MDMP.
- Establishment and maintenance of staff planning timelines.
- Integration of the information collection tasks and targeting plans with MDMP.
- Supervision of the main CP, its operations, and its positioning.
- Integration of attached units in accordance with the BCT/CAB plan.

BATTALION UNIT MNISTRY TEAM

A-8. As a member of the unit's staff, the chaplain serves as the religious staff advisor to the commander and staff. Chaplains provide religious, moral, and ethical leadership to the Army by advising the commander on these issues and their impact on Soldiers, Family Members, and unit operations. Chaplains advise commanders on the moral and ethical nature of command policies, programs, actions, and the impact of such policies on Soldiers and Families. They advise the command on such issues as—

- Accommodation of religious needs and practices for Soldiers, Families, and authorized civilians to support the free exercise of religious beliefs.
- Religious and ethical issues in the area of operations and the potential impact on mission accomplishment.
- The needs and concerns of Soldiers, Families, and authorized civilians, to include suicidal ideation, alcohol or drug abuse, or other at-risk behaviors that impact mission accomplishment.
- Marital and parenting stressors resulting from extended deployments for training or operations.
- Morale as a unit recovers from combat operations.

A-9. Under the supervision of the chaplain, the chaplain assistant—

- Assists in religious support planning, preparation, execution, and training (movement,sustainment, rehearsals and survivability).
- Coordinates for and supervises section activities (equipment maintenance, sustainment support,classified data systems and access).
- Assesses Soldier morale and advises the chaplain accordingly.
- Assists the chaplain in conducting Soldier nurture and care (pre-counseling interviews and traumatic event management).

COORDINATING STAFF

A-10. The CAB commander uses his professional knowledge, experience, and leadership style to organize his staff. The staff organization in garrison might not work in a combat environment. The commander, assisted by the XO, organizes the various staff elements into functional cells. (See Figure A-1.) The CAB staff usually organizes into these four functional cells:

- Operations.
- Intelligence.
- Sustainment.
- Network operations.

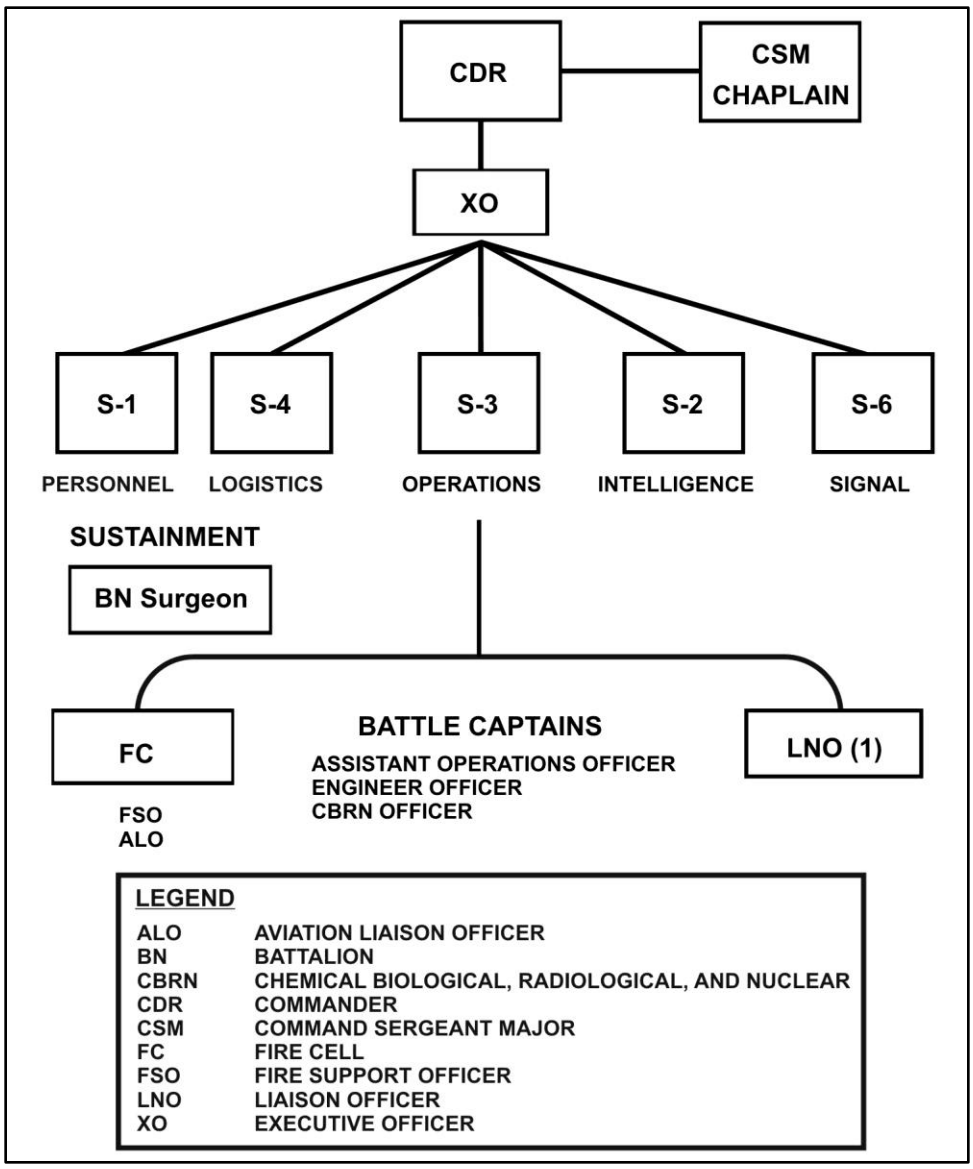

Figure A-1. CAB staff organization

A-11. During the preparation for and execution of operations, staff officers have two broad areas of responsibility. The first is to provide information, assistance and recommendations to the commander. The second is to supervise the preparation for and execution of the plan within their functional areas. Specific responsibilities include anticipating requirements, monitoring operations, taking action to support the plan, managing the information flow, making timely recommendations, conducting coordination, synchronizing operations, and maintaining continuity.

A-12. The coordinating staff includes the S-1, S-2, S-3, S-4, and the signal staff officer (S-6). Knowledge of the commander's intent guides specific decisions within the staff's authority. The staff operates to carry out the commander's intent functionally. Usually, the commander delegates authority to the staff to take final action on matters within command policy. Assignment of staff responsibility does not include authority over other staff officers or over any command element.

HUMAN RESOURCES STAFF OFFICER (S-1)

A-13. The S-1 is the coordinating staff officer for all matters concerning human resources support (military and civilian). The S-1 provides technical direction to subordinate units in four functional areas and subordinate functions. (Refer to FM 1-0 for more information.) Those areas include the following:

- Man the force, which includes:
  - Personnel readiness management (PRM).
  - Personnel accountability .
  - Strength reporting .
  - Retention operations.
  - Personal information management (.
- Provide human resources services, which includes:
  - Essential personnel services .
  - Postal operations.
  - Casualty operations.
- Coordinate personnel support, which includes:
  - Morale, welfare, recreation operations.
  - Human resources planning and staff operations.
  - Command interest programs.
  - Army band operations.
- Conduct human resources planning and operations, which includes:
  - Human resources planning and operations.
  - Operate human resources mission command nodes.

A-14. The S1 NCO provides technical and doctrinal advice to the S1 and commander. The S1 NCO serves as shift NCO in charge (NCOIC) within the CP. He also Executes personnel administrative and replacement operations to include soldier recognition and promotion and reduction actions.

A-15. The S-1 section generally operates from the combat trains command post (CTCP); though it may have personnel at the FTCP, if it is constituted. The S-1 coordinates the staff efforts of the battalion surgeon, and is the staff point of contact for equal opportunity, retention, and inspector general activities. The responsibilities of the S-1 also include:

- Military pay support.
- Legal support through the legal personnel in the brigade legal section (BLS).
- Liaison with the battalion family readiness group.
- Internal Army Records Information Management System compliance.

INTELLIGENCE STAFF OFFICER (S-2)

A-16. The S-2 is responsible for providing timely and accurate intelligence analyses and products in support of the commander, staff, and subordinate units. The S-2 supervises and coordinates collection, processing, production, and dissemination of intelligence, and integrates this into the CAB's MDMP. The S-2 is responsible for evaluating the enemy in terms of doctrine, pattern analysis, threat characteristics, capabilities, and vulnerabilities. The S-2 section usually has representatives in both the main CP and the tactical CP.

A-17. The S-2 is responsible for intelligence readiness, tasks, synchronization, and support. In addition, the S-2 plans and executes physical security programs. The duties of the S-2 include:

- Management of the intelligence process.
- Management of intelligence preparation of the battlefield (IPB), including integration of input from other staff sections.
- Situation development, to include updating the enemy/threat, terrain and weather, and civil considerations portions of the common operational picture (COP).

- Intelligence support to the targeting process, including participating in the targeting meetings, developing high-value targets (HVTs), and tracking high-payoff targets (HPTs).
- Integration of information operations considerations into the other intelligence tasks.
- Supporting COIST personnel training and operations.
- Synchronization of intelligence support with combat and information collection operations through close coordination with the XO and S-3.
- Analysis of CCIRs. This includes priority intelligence requirements (PIRs), friendly forces information requirements (FFIRs), and other IRs to develop collection tasks and requests from higher and adjacent units.
- Synchronization of intelligence support with fire support through close coordination with the FSO and S-3.

A-18. The S-2 NCO provides technical and doctrinal advice to the S-2 and commander. The S-2 NCO also supervises and trains the S-2 personnel, serves as shift NCOIC for main CP, executes the battalion's command security programs, attends targeting meetings, and assists the S-2 in product preparation.

OPERATIONS STAFF OFFICER (S-3)

A-19. The S-3 is the coordinating staff officer for all matters concerning tactical operations of the CAB. The S-3 provides technical guidance to subordinate units in the areas of training, plans, and operations. The S-3 section runs the main CP, under XO supervision. Usually, the S-3 is the senior staff member of the TAC CP, if the commander employs one.

A-20. The S-3 section also manages the battle rhythm of the CP, which includes orders production, battle tracking, operations updates and briefings, rehearsals, receipt of reports, and reports to higher headquarters. In addition, the operations section develops and synchronizes the information collection plan. Other duties of the S-3 include:

- Synchronizing the effects of CAB units in accordance with the commander's intent.
- Developing the information collection plan.
- Identifying training requirements, recommending allocation of training resources, and preparing the commander's training guidance.
- Participating in the targeting process.
- Reviewing orders, plans, and SOPs from subordinate units.
- Planning unit movements, to include deployments, air assaults, and ground convoys.
- Managing Army airspace control and terrain in the CAB AO.
- Coordinating and integrating joint, interagency, and multinational assets into operations.
- Planning for dislocated civilian operations and detainee operations (to include civilian internees, and enemy prisoners of war [EPWs]).
- Coordinating with the XO, S-6, and HHC commander on the location of CPs.

ASSISTANT OPERATIONS OFFICER

A-21. For operations that require detailed and highly synchronized planning, the S-3 usually assigns this responsibility to his assistant operations officer. The assistant operations officer also serves as unit movement and air movement officer.

OPERATIONS SERGEANT MAJOR

A-22. The operations sergeant major supervises the staff on the control of the TAC CP and the main CP. During tactical operations, he remains with the TAC CP until the main CP jumps to a new location. Operations sergeant major supervision responsibilities include, the following:

- Ensure proper accountability and maintenance of equipment and vehicles.
- Supervise precombat inspections (PCIs) and precombat checks (PCCs).
- Deploy with the assault element during tactical jumps.

- Monitor and supervise the distribution of messages and operational overlays (analog/digital) one organizational level up and two levels down.
- Coordinate and brief displacement (jump CP) procedures including tear down, setup, and quartering party activities, and be responsible for the physical setup, arrangement, and breakdown of the main CP.
- Ensure accurate setup of TAC CP and all supporting vehicles to approved configuration.
- Supervise control over both the exterior and interior organization of the main CP to include personnel, vehicles, and tents.
- Leverage biometric capabilities to validate identity of authorized visitors to the CP.
- Supervise the CP security plan and develop specific security programs such as threat awareness and operational security (OPSEC).
- Responsible for staff training.
- Assist the battle captain with rehearsals and executing battle drills.
- Give guidance and supervise the construction of the terrain board model during planning phases.
- Ensure all information within the CP (coming and going) is disseminated, updated, collaborated, and managed properly.
- Monitor situations and ensure CP maintains communications with attached, subordinate, adjacent units, and higher headquarters.
- Manage reports/battle tracking.
- Oversee the timely and accurate posting of graphics and overlays.

A-23. The S-3 NCO acts as battle NCO. He also provides technical and doctrinal advice to the S-3 and commander, prepares CP for orders, drills, briefs, and rehearsals, executes CP security and movement, briefs attachments on TOC SOPs, and can serves as shift NCOIC for CP.

ENGINEER OFFICER

A-24. The battalion engineer is responsible for the integration of assured mobility within the CAB. He advises the commander and staff on all aspects of engineer-related planning, coordination, and support of operations. In the role of integrating all of the engineer functions, the battalion engineer is also the TF engineer, and remains so even when other engineer augmentation is task-organized to the CAB. The TF engineer facilitates all necessary reachback for engineer expertise and advises the commander on necessary engineer and EOD augmentation to support specific CAB missions. His responsibilities include:

- Recommending essential tasks for mobility, countermobility, and survivability tasks (M/CM/S) to the commander.
- Participating in targeting meetings.
- Coordinating for general engineering work (like construction) in the battalion area of operation.
- Integrating environmental considerations into the operational plan.
- Advising the commander on his command environmental program.
- Coordinating for geospatial engineering support.

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR OFFICER

A-25. The battalion CBRN staff typically includes a CBRN officer and CBRN NCO. Many battalion-size units also have a CBRN specialist assigned to assist in the employment of organic operational-level decontamination capabilities. The staff performs core CBRN staff functions, as applicable, with emphasis on the following key tasks:

- Advise the commander on all CBRN threats and hazards.
- Implement CBRN protective measures.
- Provide CBRN warning and reporting.
- Prepare CBRN plans and orders.
- Plan operational-level decontamination missions.
- Train and mentor company level CBRN Soldiers.

MASTER GUNNERS

A-26. The BFV and tank master gunners are primarily responsible for certifying the crew evaluators. They assist the S-3 with training scenarios and forecast ammunition, ranges, and training aids. They also train range safety personnel. During combat operations, master gunners advise the commander on the tactical capabilities of the BFV and tank weapons systems against threat systems. They also assist with CP operations.

BATTLE CAPTAINS

A-27. The officers and NCOs of the operations section serve as battle captains and battle staff NCOs to assist the command group in controlling the CAB. They remain in the CP, keeping focused on the current operation, and continuously assisting the commander in the mission command of the fight. When operations deviate from the plan, they assist the commander with his decision making. Their responsibilities include:

- Monitoring the status of CCIRs.
- Conducting battle tracking by—
  - Monitoring current location of friendly and enemy units, and groups of civilians.
  - Assessing the activities and combat power of friendly and enemy units.
  - Monitoring the status of adjacent and supporting units.
- Monitoring and synchronizing the COP displays in the main and tactical CPs.
- Ensuring that CAB COP information and required status reports are provided to higher subordinate, adjacent, and supported headquarters.
- Supervising the flow of information among staff cells within the CAB CPs.
- Providing current status to assist with MDMP and planning future operations.
- Enforcing CP policies in accordance with unit TACSOPs and current operations order (OPORD).
- Continuing to perform their primary staff responsibilities as well as those of the battle captain.

LOGISTICS STAFF OFFICER (S-4)

A-28. The S-4 is the coordinating staff officer for sustainment operations. The S-4 provides staff oversight to CAB units in the areas of supply, maintenance, transportation, and field services. Usually, the S-4 is the OIC of the CTCP.

A-29. The S-4 is the CAB staff integrator for the FSC commander, who executes sustainment operations for the CAB. The duties of the S-4 include:

- Developing logistics plans and support annexes to support CAB operations.
- Coordinating with the supporting FSC and BSB on current and future support requirements and capabilities.
- Coordinating for all classes of supply.
- Designating supply routes and locations of logistical elements (in coordination with the S-3 and FSC commander).
- Organizing logistics package (LOGPAC) operations.
- Monitoring and analyzing the equipment readiness status of all CAB units.
- Planning transportation to support special transportation requirements (such as casualty evacuation [CASEVAC]).
- Recommending sustainment priorities and controlled supply rates to the commander.

SIGNAL STAFF OFFICER (S-6)

A-30. The S-6 is the principal staff officer for all matters concerning communications, electromagnetic spectrum operations, and networks within the unit's area of operations. The S-6 is responsible for information management usage procedures and information systems to collect, process, store, display, and disseminate information. The S-6 provides technical oversight of CAB units in the areas of network operations, information dissemination, and information assurance. The S-6 section establishes and operates the battalion radio, satellite,

and wire communications systems. The S-6 section also provides retransmission nodes. The responsibilities of the S-6 include:

- Assessing CAB communications and computer vulnerability to enemy and civilian actions.
- Recommending CAB network priorities and constraints needed to accommodate bandwidth limitations.
- Advising the S-3 on CP locations based on communications capabilities.
- Integrating ABCS and other information systems with the Soldier information network.
- Arranging for communications and information systems maintenance.
- Monitoring communications security (COMSEC).
- Maintenance of information systems and tactical local area network (LAN) management, including passwords and information security.

CIVIL-MILITARY OPERATIONS

A-31. During stability and defense support of civil authorities tasks, the CAB commander may assign this responsibility to an officer or senior NCO to assist him on relations between the civilian population and military operations. The responsibilities can include:

- Advising the commander on the effects of the civilian population on operations.
- Assisting a CA unit in the operation of a civil-military operations center.
- Assisting the S-3 to integrate attached CA units into the CAB.
- Assisting the development of plans to deconflict civilian activities with military operations.
- Planning community relations programs to gain and maintain public understanding and support of military operations.
- Coordinating with the FSO on culturally sensitive sites and protected targets.

SPECIAL STAFF

A-32. The CAB staff includes several special staff sections that assist the commander in providing professional or technical oversight of CAB units. The commander delegates each staff officer an appropriate planning and supervisory authority.

FIRE SUPPORT OFFICER

A-33. The FSO is the special staff officer responsible for coordinating and synchronizing fire support, which includes Army indirect fires and joint fires. He advises the commander and staff on all aspects of fires planning, coordination, and execution in support of operations. He assists the S-3 to integrate fires into the maneuver commander's concept of operation. (Refer to Chapter 6 for more information.)

AIR LIAISON OFFICER

A-34. The battalion air liaison officer (ALO) is usually a highly experienced enlisted Air Force joint terminal attack controller (JTAC) responsible for coordinating and controlling all close air support (CAS) and employment of Air Force assets in support of the CAB. (Refer to Chapter 6 for more information.)

SNIPER EMPLOYMENT OFFICER

A-35. The commander assigns the mission of sniper employment officer (SEO) as an additional duty. The SEO should understand sniper employment as well as the strengths and weaknesses of the personnel in the sniper squad. The SEO can be a member of the battalion staff or the HHC. In the SEO's absence, either the sniper squad leader or the individual sniper team leader can act as the SEO. Selecting an officer with the capability and time to function as an SEO is critical to ensure the snipers are trained and represented during the planning process. The scout platoon leader and HHC XO are possible candidates for SEO. (Refer to TC 3-22.10 for more information.)

SURGEON

A-36. The medical platoon leader serves as the battalion surgeon. He is responsible for advising the commander on the health of the command and other AHS issues. The surgeon receives assistance from a medical operations officer for administration, logistics, and planning of medical platoon operations; a physician's assistant for medical treatment; and a medical platoon sergeant for platoon operations. The surgeon is usually located in the BAS during combat operations. The surgeon's responsibilities include:

- Oversight of medical treatment that medical platoon personnel provide.
- Supervision of HSS and FHP planning, maintenance, and training.
- Recommendations for casualty collection point and aid station locations and the evacuation routes to support them.
- Coordination for ground and air ambulance support.
- Integration of the CAB HSS/FHP plan into the BCT plan.
- Identifying health threats and medical-related CCIRs.
- Ensuring that health threat and medical intelligence considerations are integrated into the MDMP.
- Advising commanders on FHP CBRN defensive actions, such as immunizations, use of chemoprophylaxis, pretreatments, and barrier creams.
- Monitoring occupational health surveillance in coordination with the preventative medicine team.

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Appendix B

Mission Command

B-1. *Mission command systems* are the arrangement of personnel, networks, information systems, processes and procedures, and facilities and equipment that enable commanders to conduct operations. (ADRP 6-0) These systems provide the CAB with the tools and the ability to receive, analyze, and distribute relevant information and orders rapidly. The CAB utilizes these multiple mission command systems, both analog and digital, to gain an information advantage to collect, process, and disseminate an uninterrupted flow of information while exploiting or denying an adversary's ability to do the same.

PERSONNEL

B-2. Soldiers and leaders exercise the human skills, knowledge and abilities making them the most important of the five. Commander's key personnel include seconds in command, command sergeants majors, and staffs.

NETWORKS

B-3. Networks are a grouping of interconnected things that enable commanders to connect and communicate with individuals and organizations with a common interest or goal. Connecting people and organizations allow the ability to share information, ideas, and promote unit of effort. An example of a network is LandWarNet. This system allows the Army to collect, process, store, display, disseminate, and protect information worldwide.

INFORMATION SYSTEMS

B-4. An information system consists of equipment that collect, process, store, display, and disseminate information. Information systems enable extensive information sharing, collaborative planning, execution, and assessment that promote shared understanding. (ADRP 6-0) An example is the Force XXI Battle Command Brigade and Below (FBCB2). This system allows the immediate ability to send reports, receive orders and graphic, and to synchronize enablers.

PROCESSES AND PROCEDURES

B-5. Processes are a series of actions directed to an end state. Procedures are standard, detailed steps which describe how to perform specific tasks to achieve the desired end state. Together they minimize confusion, misunderstanding, and hesitation while increasing organizational competence.

FACILITIES AND EQUIPMENT

B-6. A facility is a structure or location that provides a work environment and shelter such as, command posts, platforms, operation centers, and signal nodes for the other components of the mission command system. Facilities range from a command post composed of vehicles and tentage, to platforms, to hardened buildings. Examples of equipment needed to sustain a mission command system include vehicles, radio or signal equipment, generators, and lighting. (ADRP 6-0)

OTHER INFORMATION SYSTEMS

B-7. In addition to ABCS, the CAB staff is equipped with several other information systems that support mission command.

Command Post of the Future

B-8. The command post of the future is a collaborative application that enables the commander and battle staff to collect, collate, display, map, and analyze data. command post of the future uses three monitors to display its various applications. It provides planning and mapping tools to support the commander's battle management. command post of the future is not a replacement for the ABCS, since it depends on ABCS for most of its data. Usually, the CAB has two command post of the future terminals.

Medical Communications for Combat Casualty Care

B-9. Medical communications for combat casualty care (MC4) is a computer system that unifies multiple software functionalities from the Theater Medical Information Program (TMIP) onto its MC4 platform. The combined hardware and software system provides the link between the CAB's medical platoon to health care providers at all roles of care. The computer system receives, stores, processes, transmits, and reports medical mission command, medical surveillance, casualty movement and tracking, medical treatment, medical situational awareness, and medical logistics (MEDLOG) information onto designated medical data bases

Property Book Unit Supply - Enhanced

B-10. The property book unit supply - enhanced (PBUSE) is a web-based system that operates on the Army Knowledge Online portal. The S-4 section uses PBUSE to help logistically support BCT units. PBUSE automates the process to account for, and order, all Class VII and other nonexpendable items in the CAB. PBUSE provides a responsive and efficient means to maintain accountable records for the Army's inventory of property in the hands of modified table of organization and equipment (MTOE) and tables of distribution and allowance (TDA) units in the Regular Army, National Guard, Reserve, and on installations.

Movement Tracking System

B-11. The Movement Tracking System enables the CAB to examine radio frequency identification tags, identify position, track progress, and communicate with the operators of tactical wheeled vehicles. Movement Tracking System uses an L-Band, satellite-based system consisting of mobile units mounted in vehicles and base units in CPs. The Movement Tracking System includes a global positioning system (GPS), which enables the Movement Tracking System to send messages between base and mobile units; examine radio frequency identification tags on the payload to question or verify transportation control number, commodity/class of supply, consignee Department of Defense activity address code and status; and locate/track a vehicle position on a map background. Movement Tracking System can exchange text messages with FBCB2 and share situational awareness data. Usually, the S-4 section houses the Movement Tracking System.

Transportation Coordinator's Automated Information for Movement System II

B-12. The Transportation Coordinator's Automated Information for Movement System II is a joint service system that automates the processes of planning, organizing, coordinating, and controlling unit-related operations such as deployments, sustainment, redeployment, and retrograde operations. The S4 section uses it to—

- Maintain personnel and equipment lists.
- Build the unit deployment list.
- Create convoy and other movement plans.
- Document hazardous cargo.
- Build packing lists for containers and pallets of cargo.
- Schedule unit and cargo movements.

Army Human Resource Workstation

B-13. The Army human resource workstation is a system of web-based, automated personnel systems. Army human resource workstation includes electronic military personnel office (eMILPO), a web-enabled application that users can access via the Army Knowledge Online portal to perform personnel actions and strength accounting.

Personal Computers

B-14. MTOE does not authorize the purchase of personal computers; however, CABs may obtain authorization through TDA to purchase personal computers. These computers, once properly accredited, can be granted access to the CAB LAN. The systems architecture in the CAB main CP includes data and Voice over Internet Protocol (VoIP) access to the—

- Nonsecure Internet Protocol Router Network (NIPRNET).
- Secret Internet Protocol Router Network (SIPRNET).

COMMAND POST ORGANIZATION

B-15. CAB command post facilities consist of the vehicles and locations from which the CAB commander, aided by staff, directs the battle and sustains the force. These facilities are organized with varying levels of staff participation at each echelon. The CAB always has two standard command posts, the command group and the main CP. Depending on METT-TC analysis, the CAB commander could choose to deploy a TAC CP, CTCP, or FTCP. Figure B-1 shows CAB CPs positioned for a movement to contact.

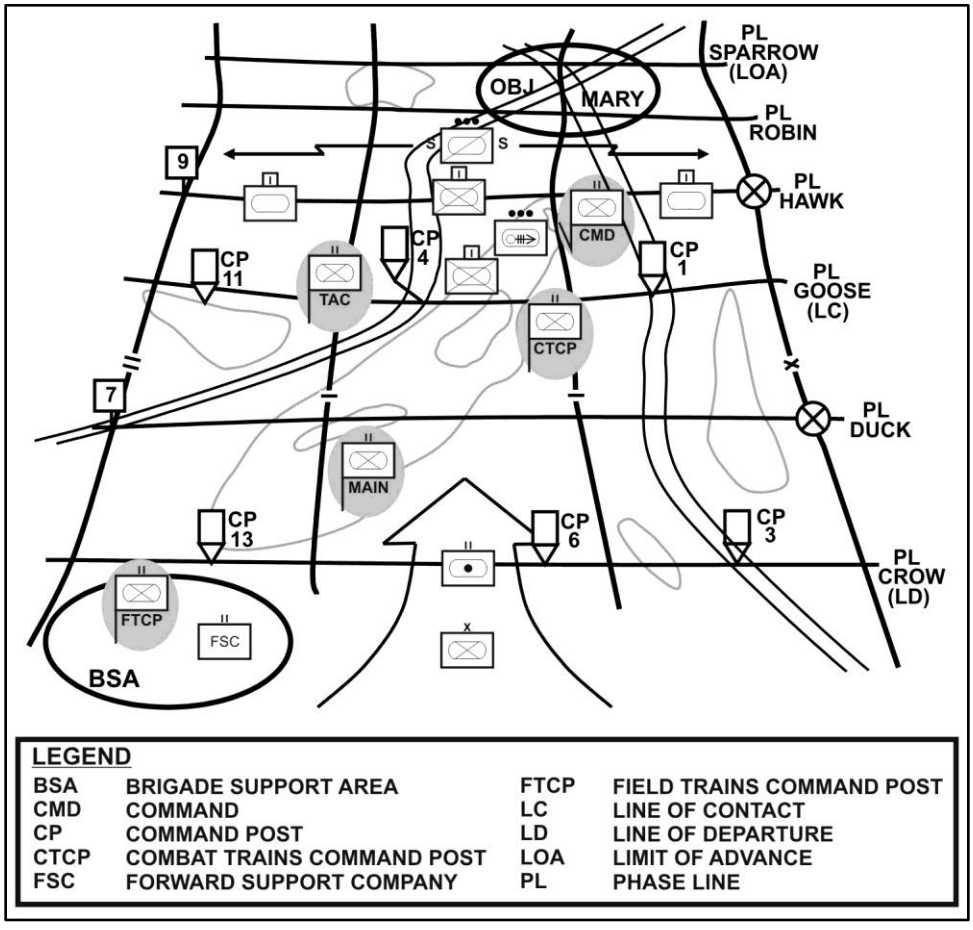

Figure B-1. CAB command post arrangement

B-16. The CAB commander, assisted by his XO and CSM, ensures proper staffing when he chooses to deploy a TAC CP, CTCP, or FTCP. Even if the CAB has enough personnel to support multiple CPs, it might have communications or other equipment constraints. Figure B-2 illustrates one way to distribute staff officers among various CAB CPs. Figure B-3 illustrates one way to arrange the main CP.

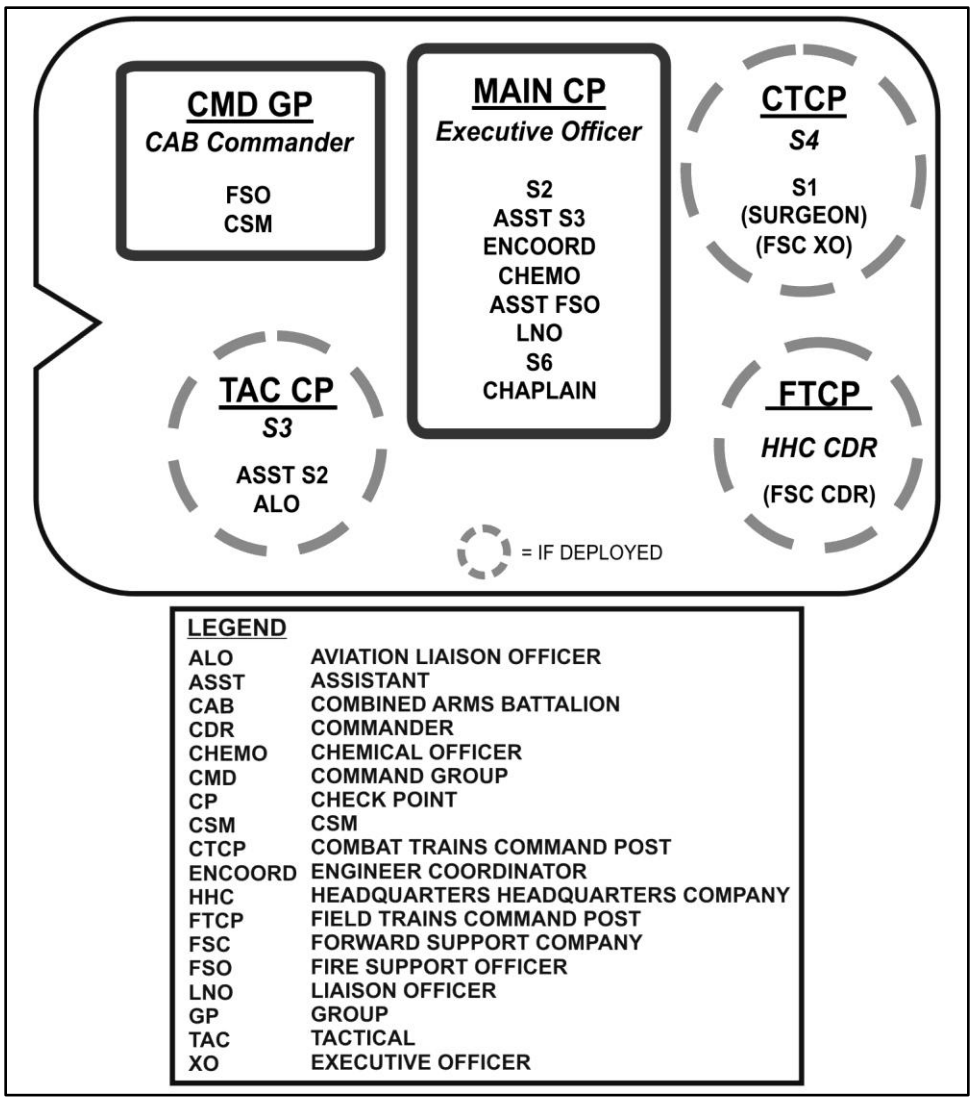

Figure B-2. Notional arrangement of CAB staff by command post

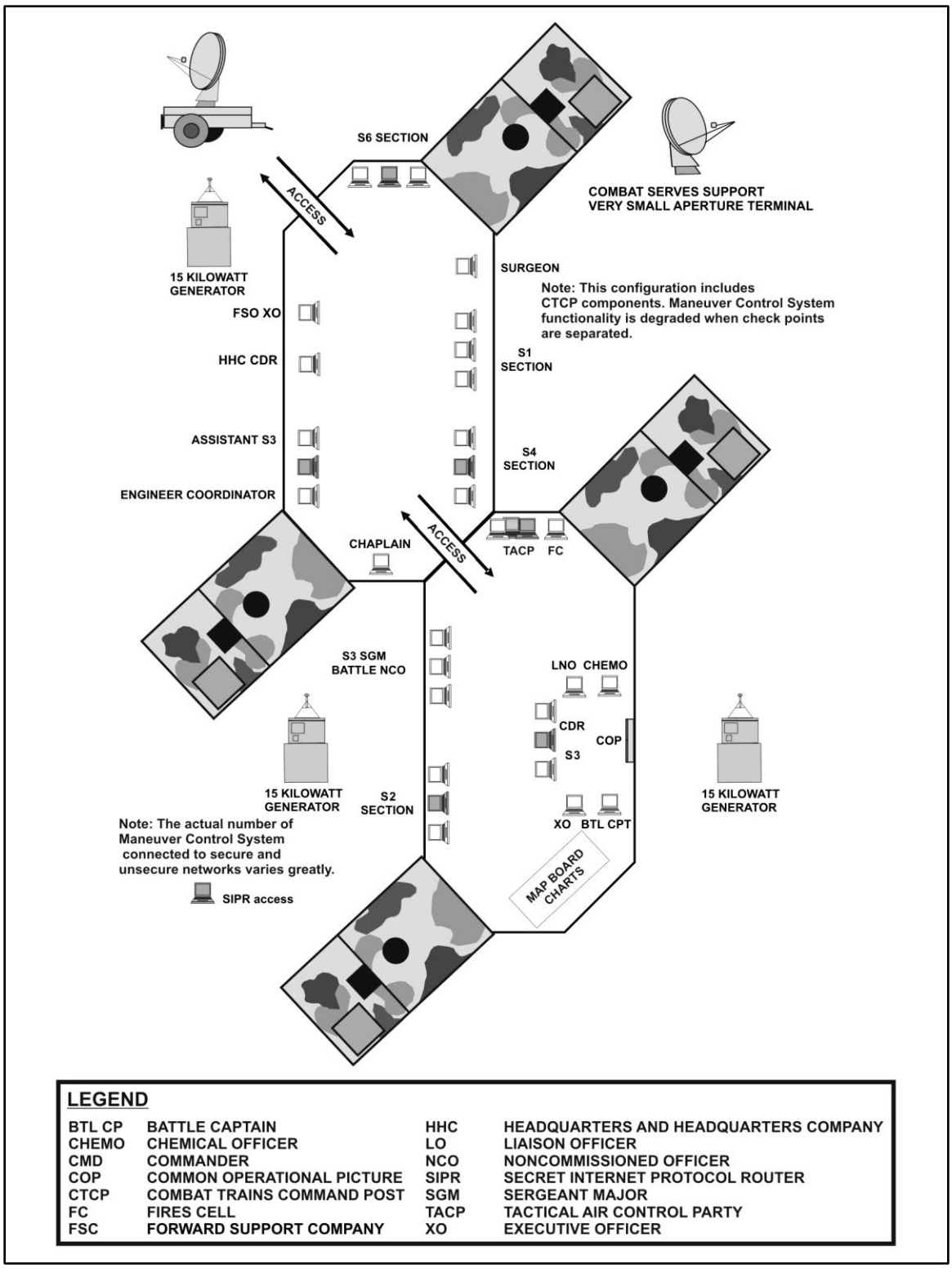

Figure B-3. Notional main command post arrangement

COMMAND GROUP

B-17. The CAB command group consists of the commander and those selected to assist him in critical mission command functions during the battle. The commander determines the composition of his command group based on METT-TC analysis. Usually, the FSO and ALO are part of the CAB command group.

B-18. The command group fights the battle. The group positions itself so that it can "see the battle," and so that the commander can issue appropriate orders at critical times. "Seeing the battle" means more than simply being in a location to observe decision points (DPs) and critical actions. "Seeing the battle" also means that the command group is in a position to receive reports on key indicators that the commander discussed with his subordinates, and that upon receipt of these reports, the commander is in a position to order decisive action. The FSO must be in a position to coordinate indirect fires; he must quickly respond to changes in the situation or mission with recommended changes to the fire support plan. The ALO must be in a position to see the battlefield in order to coordinate close air support, shift preplanned CAS targets, and advise the commander on CAS issues.

TYPES OF COMMAND POSTS

B-19. There are several types of command post from which the commander and staff conduct mission command and other warfighting functions during unified land operations.

MAIN COMMAND POST

B-20. The main CP is the CAB commander's principal mission command facility. Usually, the XO is responsible for supervising all staff activities and functions of the main CP.

B-21. The primary considerations in positioning the main CP are survivability, communications, and accessibility. The CAB main CP must maintain continuous communications and coordination with the companies and the BCT main CP. The main CP must physically configure itself in a manner that facilitates the best flow of information and crosstalk across all staff cells. (Refer to FM 6-0 for more information.)

TACTICAL COMMAND POST

B-22. The TAC CP is a facility containing a tailored portion of a unit headquarters designed to control portions of an operation for limited time. The TAC CP aids in the control of maneuver and fires during the battle. Based on METT-TC analysis, the commander determines the composition, nature, and tasks of the TAC CP. (Refer to FM 6-0 for more information.)

B-23. The S-3 usually leads the TAC CP with representatives from S-2, S-3, and fires cells sections. The TAC CP is not a permanent organization and usually is prescribed by TACSOP and modified as necessary. It is fully mobile, enabling the S-3 to assist the commander anywhere on the battlefield. Usually, the CAB employs the TAC CP only for the actual battle, with the main CP controlling the CAB during other periods.

B-24. The TAC CP usually operates in two to three armored vehicles modified for mission command. The crews of the vehicles in the TAC CP assist in operating radios and network systems, moving the vehicles, and providing security; thus freeing the staff officers and NCOs to concentrate on the battle.

COMBAT TRAINS COMMAND POST

B-25. The CTCP is the coordination center for sustainment of the CAB. Usually the S-4 is responsible for operations, movement, and security of the CTCP and the combat trains. Often, the FSC has a representative, such as XO, at the CTCP. The CTCP also monitors the current tactical situation on the command net to assume its function as the alternate main CP. The CTCP usually performs the following functions:

- Plans and coordinates sustainment for tactical operations.
- Serves as alternate for the main CP.
- Prepares to shift support if the main effort changes.
- Maintains personnel and logistics status reports on all organic and attached units.
- Reports to the main CP any change in the ability of the sustainment system to support the operation.

- Casualty operations.
- Ensures personnel accountability of all assigned or attached CAB personnel.
- Essential personnel services.

B-26. The combat trains usually consist of emergency Class III and Class V supplies, the MCP, the S-1 and S-4 sections, and the BAS. The factors of METT-TC must be considered when positioning the CTCP in the CAB AO. (Refer to Chapter 8 for more information.)

FIELD TRAINS COMMAND POST

B-27. Usually, the HHC commander leads the FTCP, and the FSC commander or his XO collocate with the CAB's FTCP. The FTCP is usually the coordination and control center for the S-1's personnel and administration center , company supply sections, and FSC. The HHC commander generally focuses on CP operations while the FSC commander commands his company and coordinates all sustainment requirements for the CAB.

COMMAND POST SURVIVABILITY

B-28. CP survivability depends mostly on concealment and mobility. The best way to protect a CP is to prevent the enemy from detecting it. Good camouflage and proper noise, light, and signal discipline enhance the security provided by a good location. In an urban environment, emphasis is placed on check points, road blocks, and observation posts to secure the command post.

LOCATION

B-29. Built-up areas are good locations for CPs because they provide cover and concealment, access to electricity and other services, and good access and egress routes. However, they also can put indigenous populations at risk, and can provide enemy units covered and concealed positions to monitor and attack the CP. If a built-up area is not available, position the CP on a reverse slope with cover and concealment. Avoid key terrain features such as hilltops and crossroads. Locate CPs on ground that is trafficable, even in poor weather. Other considerations for positioning CPs include:

- Ensuring LOS communications with higher, lower, and adjacent units.
- Avoiding redundancy of communications.
- Masking signals from the enemy.
- Using terrain for passive security (cover and concealment).
- Collocating with tactical units for mutual support and local security.
- Avoiding possible enemy target reference points (TRPs) for enemy artillery and CAS.
- Locating the CP near an existing road network out of sight from possible enemy observation.

B-30. Other factors that can enhance survivability include dispersion, size, redundancy, and mobility. Large facilities and formations attract attention while smaller, mobile, formations are more readily concealed and protected. (Refer to FM 6-0 for more information.)

OPERATIONAL SECURITY

B-31. In general, positioning CPs away from major enemy mounted avenues of approach reduces the enemy threat. There should be no signs advertising CP locations. Disperse CP vehicles, and thoroughly camouflage all vehicles and equipment. Maintain noise and light discipline.

B-32. CPs require a security force, and this force must have communications with the CPs. Establish security force positions as in any defensive position. That is, with a 360-degree perimeter and located far enough out to prevent enemy fires on the CPs. The security force should have antitank weapons to protect CPs from enemy armor. Establish a quick reaction force and rehearse the execution of the perimeter defense. CABs usually rely on off-duty personnel for CP security. The command group may assist in securing a CP if collocated since units sometimes are unable to employ combat elements to help secure a CP.

B-33. All subordinate units and elements of the CP must receive near and far recognition signals. The CP uses these signals, challenges, and passwords to control access into its perimeter. In case of artillery or air attack, a designated rally point and an alternate CP should be at least 500 to 1000 meters away.

COMMAND POST DISPLACEMENT

B-34. CPs can displace as a whole or, more often, by echelon. Displacement as a whole usually is reserved for short movements, with communications maintained by alternate means and minimal risk of degrading CP operations.

B-35. A portion of the CP, called a "jump CP," moves to the new location, sets up operations, and takes over OPCON of the battle from the main CP. The remaining portion of the CP then moves to rejoin the jump CP. The jump CP consists of the necessary vehicles, personnel, and equipment to assume CP operations while the remainder moves. At battalion level, the jump CP usually comes from within the main CP. Another technique of displacement is to hand off control to the TAC CP, and move the main CP as a whole.

B-36. The XO or S-3 selects a general location for the jump CP site. Sometimes a quartering party accompanies the jump CP. The quartering party can consist of a security element and personnel, and equipment for quartering the remainder of the CP. The S-6, who is usually part of the quartering party, ensures that the new site can communicate on all nets. When the jump CP becomes operational, it also becomes the net control station for the unit. The remainder of the CP then moves to rejoin the jump CP.

COMMAND POST STANDARD OPERATING PROCEDURES

B-37. TACSOPs for each CP should be established, known to all, and rehearsed. An inclusive CP SOP will assist with efficient mission command. The CAB's SOP must be tied into and support the SOP for the ABCT, as the company SOP should be based on the CAB SOP to ensure they all support one another. (Refer to FMs 6-0 and 7-15 for more information.) Some items to include are:

- The organization and setup of each CP.
- Plans for teardown and displacement of each CP.
- Eating and sleeping plans.
- Shift manning and operation guidelines.
- Physical security plans.
- Priorities of work.
- Loading plans and checklists.
- Orders production.
- Clearance of fires drills.
- Techniques for monitoring enemy and friendly situations.
- Displays of electronic map boards and status charts.
- Maintenance of CP journals and logs.

B-38. Although the CAB is digitally equipped, there could be elements operating within a joint or multinational environment that does not have digital equipment. In such cases, the staff must realize that integrating an analog unit into the CAB requires the use of older analog control techniques. In essence, two control systems must be in operation, with particular attention paid to keeping the analog unit(s) apprised of all the relevant information that is flowing digitally. The CAB TACSOP should include:

- Production and distribution of hard copy orders and graphics.
- More graphic control measures. Digital units tend to use fewer graphic control measures due to increased SU.
- Instructions on how to receive standardized reports over voice communications.
- Procedures to equip LNO teams with digital systems to give analog units limited connectivity.

COMMAND POST FUNCTIONS

B-39. All CPs perform six basic functions. The six functions are receive, distribute, analyze information, submit recommendations to the commander, integrate resources, and synchronize resources. Each have subtasks and are listed below:

- Receive information, which includes:
  - Receive messages, reports, and orders from subordinate units and higher headquarters.
  - Monitor tactical situation.
  - Maintain a journal of all significant activities and reports.
  - Maintain and update unit locations and activities.
  - Monitor enemy situation.
  - Maintain a status of critical classes of supplies.
- Distribute information, which includes:
  - Submit reports to higher headquarters.
  - Serve as a communications relay between units.
  - Publish orders and instructions.
  - Process and distribute information to appropriate units or staff sections.
- Analyze information, which includes:
  - Consolidate reports.
  - Anticipate events and activities, taking appropriate action as required.
  - Conduct predictive analysis based on the tactical situation.
  - Identify information that relates to CCIRs.
  - Identify the need to execute contingency plans based on the current situation.
- Submit recommendations to the commander, which includes:
  - Submit recommendations to the commander based on information available and analysis conducted.
- Integrate resources, which includes:
  - Coordinate the integration of all warfighting functions.
- Synchronize resources, which includes:
  - Coordinate the capabilities of all warfighting functions.

MAPS AND CHARTS

B-40. Maps and charts help staffs present relevant information to the commander. Although the CAB has numerous information systems that assist in presenting that information, it is easy to become overwhelmed with vast amounts of information. The CP should maintain current information in the form of easily understood map graphics and charts. Combining situation maps with status charts gives the commander and staff a very necessary "snapshot" during both the planning process and during battle execution. Commanders and staffs must update this information continuously. Examples of information to be plotted and tracked include:

- Friendly unit locations.
- Enemy unit locations.
- Graphic control measures (restrictive and permissive).
- Obstacles (friendly and enemy).
- Personnel status.
- Weapons system status.

B-41. For simplicity, analog and digital maps should be the same size and scale. This makes the information easier to comprehend when shifting from one view to another. Following operations, Soldiers should conduct after action reviews on the tracking systems.

PERSONNEL

B-42. The battle captain and operations sergeant major are vital to effective command post operations. Other key staff personnel responsibilities are discussed throughout with respect to the primary warfighting function each support. (Refer to FM 6-0 for more information.)

BATTLE CAPTAIN

B-43. The focus of the main CP staff is on collecting the critical information that the commander needs to fight the battle. Information flow is a constant problem in most CPs, especially since everyone in the CP must provide input to the COP. The battle captain's role is to plan, coordinate, supervise, and maintain communication flow throughout the main CP to ensure the success of all assigned missions. The battle captain assists the commander, XO, and S-3 by being the focal point for communications, coordination, and information management. The battle captain can also be the main CP OIC in the absence of the commander, XO, and S-3.

B-44. The battle captain has the overall responsibility for the smooth functioning of the main CP and its staff sections. This responsibility includes:

- Maintaining continuous operations of the main CP while static and mobile.
- Battle tracking the current situation using decision support templates, triggers, and execution matrices to ensure events are proceeding as planned.
- Ensuring that all stations maintain communications with and among each other and that station personnel route and log all messages and reports according to TACSOP.
- Assisting the XO to coordinate staff functions, ensuring a smooth and continuous information flow among the staff sections.
- Processing essential data from the incoming flow of information; gathering all tactical and logistical information; and distributing the information to the XO, S-3, and other staff sections on a regular basis.
- Ensuring prompt clearance of fires.

B-45. The battle captain ensures that all staff sections in the main CP understand their functions in accordance with TACSOP, and coordinates staff briefings, updates displays and charts, and performs other staff actions. As a focal point in the CP, the battle captain processes essential information from incoming data, assesses it, ensures dissemination, and makes recommendations to the CAB leadership. The battle captain assists the CAB commander by ensuring the warfighting functions stay synchronized.

B-46. Information management in the CP can include processing emails, journals, messages, reports, FRAGORDs, and RFIs. The battle captain ensures the consistency, accuracy, and timeliness of information leaving the CP, including preparing and dispatching FRAGORDs and WARNORDs. In addition, he monitors and enforces chart and status board updates, which are necessary for battle management. The battle captain ensures this posted information is timely, accurate, and accessible.

B-47. To function effectively, the battle captain must have a working knowledge of all sections in the main CP, understand the unit TACSOP, and ensure the staff section uses the TACSOP. He must know the current plan and task organization of the unit, and understand the commander's intent. In addition, the battle captain must understand the limits of his decision making and action authority.

B-48. The CAB must include the battle captain in the decision-making process; this is because the battle captain must know the rationale behind certain key decisions. He must know the technical aspects of the battle plan and understand the time-space relationship to execute any specific support task. He must understand and enforce the battle rhythm – the standard events or actions that happen during a typical 24 hour period, and ensure that the main CP staff is effective throughout the period. Battle captains use their judgment to adjust staff activities and events to accomplish the CP mission across different shifts, varying tactical circumstances, and changes in CP location.

OPERATIONS SERGEANT MAJOR

B-49. The operations sergeant major is the senior NCO in the main CP and is responsible for running the CP. He is responsible for the proper manning, training, equipment, and execution of operations. The operations sergeant major is responsible for ensuring that all assigned and attached personnel adhere to both unit standards and TACSOPs (including movement, setup, maintenance of power and climate control, and internal security). The success of operations in the CP can be directly attributed to how well the operations sergeant major runs the CP.

B-50. Usually, the operations sergeant major is responsible for conducting the main CP battle drills. Unit TACSOPs should define these drills, and units should rehearse them during training and operations. Typical CP battle drills include:

- Execute a downed aircraft recovery team mission.
- React to an air attack.
- React to a ground attack.
- React to a CBRN attack.
- React to indirect fire.
- Clearance of fires.
- React to jamming or suspected communications compromise.
- Execute time-sensitive targets.
- Execute a close air support or joint fires mission.
- React to a mass casualty incident.
- React to a civil riot or incident.
- React to significant collateral damage.
- React to a misinformation incident.

SIGNAL SUPPORT

B-51. Communication is the means through which the CAB exercises mission command. There must be open lines of communication up, down, and laterally. Effective communications at all levels is maybe the greatest challenge, because of the influx of technology and the fog of war. Communications are further complicated during combined arms maneuver and operational environments with reduced lines of sight. Training, planning, and rehearsing communications should include:

- Back-up means of communications at key locations.
- TACSOPs that specify immediate actions to take in case of jamming, including prearranged alternate frequencies and code words.
- Make sure subordinates know what to do during interruptions in communications.
- Practice disciplined communications procedures to eliminate nonessential conversations and avoid overloading communications systems.

RESPONSIBILITIES

B-52. All units take immediate action to restore lost communications; this includes communications between and among headquarters CP. These responsibilities apply to establishing a liaison between headquarters. The order of responsibilities for communications is—

- Senior to subordinate.
- Supporting to supported.
- Reinforcing to reinforced.
- Passing to passed (for forward passage of lines [FPOL]).
- Passed to passing (for RPOL).
- Left to right.
- Rearward to forward.

MISSION COMMAND

B-53. The CAB has an integrated system of communications and networks to aid the commander in mission command. These capabilities enable him to rapidly share information between him and his subordinate commanders, staff, and higher headquarters. The CAB's communications and networks—

- Provide the information needed to develop SU in support of the commander's mission.
- Support the commander's implementation of mission command across the range of military operations by regulating forces and functions in accordance with the commander's intent.
- Provide a link to develop a COP of the situation.
- Recognize and protect friendly forces.
- Conduct operations with lethal and nonlethal means.
- Operate with joint and multinational forces.

Frequency Modulation and Digital Communications

B-54. Whether to use analog/frequency modulation (FM) or digital means of communication is a function of the situation and TACSOPs. Even though both systems are critical for effective mission command in the CAB, FM communications is the primary method for control during operations while on the move, with additional support from the situational information display provided by FBCB2. Some general considerations can help guide the understanding of when to use which mechanism. The following paragraphs detail those considerations.

B-55. FM is the primary method of communications when units are in contact. Prior to and following an engagement, the staff and commanders use digital systems for disseminating orders and graphics and conducting routine reporting. During operations, however, the CAB staff uses a combination of systems to report and coordinate with higher and adjacent units.

B-56. Staffs must remain sensitive to the difficulty and danger of using digital systems when moving or in contact. They should not expect to send or receive digital reports under those conditions. Digital reporting builds the COP (particularly the posting of enemy icons), and failure to render such reports results in an incomplete COP. Additionally, the units must build the COP as the action occurs in order to provide the commander with a COP that contains relevant information that leverages his decision making. Other general guidelines include:

- CAB personnel at any echelon should use FM voice to report initial contact; digital enemy spot reports should follow as soon as possible to generate enemy situational information.
- Elements moving about the battlefield (not in command posts) use FM voice unless they can stop and generate a digital message or report.
- Emergency logistical requests, especially casualty evacuation requests, should be initiated on FM voice with a follow-up digital report if possible.
- Combat elements moving or in contact should transmit enemy spot reports on FM voice; their higher headquarters should convert FM reports into digital spot reports to generate situational information. At company level, the XO and 1SG convert the reports.
- Calls for fire on targets of opportunity should be sent on FM voice; fire support teams (FISTs) submit digitally to AFATDS.
- When equipped with the far target locator, vehicle crews should engage the target with the far target locator and select the call for fire message button on the spot report enabling a digital call for fire.
- In the initial part of an engagement, FISTs should send planned calls for fire digitally.
- Units should send routine logistical reports and requests digitally.
- Subordinates to CAB should send routine reports digitally prior to and following combat.
- Units should send orders, plans, and graphics digitally, accompanied by an FM voice call to alert recipients that they will receive critical information. Additionally, the transmitting element should request that an appropriate Soldier (usually not the computer operator) verbally acknowledge both receipt and understanding of the transmitted information.

- Units should send obstacle and chemical, biological, radiological, and nuclear (CBRN-1) reports by voice initially; and then follow with digital reports. The digital reports can generate a geo-referenced situational information message portraying the obstacle or contaminated area across the network.

Limitation of Digital Mission Command Systems

B-57. The major limitation when dealing with the various types of digital systems is the difficulty in employing them while moving. Many of the digital systems must be stationary or have LOS communications with BCT warfighter information network-tactical (WIN-T) systems. Although FBCB2 (EPLRS or BFT) can provide a good deal of situational awareness to the CAB commander and his staff, the full capabilities of the ABCS system might not be available when the CAB main CP is moving or preparing to move.

B-58. Because of this limitation, it is important that the staff develop and rehearse tactics, techniques, & procedures (for example, TACSOP) for transferring the functions of the main CP to alternate CPs. Then whenever the tactical situation requires the main CP to displace, the main CP staff can transfer functions to the TAC CP, CTCP, FTCP, or a combination of the CAB's alternate CPs.

B-59. One technique that ensures the transfer of the main CP functions goes smoothly is to integrate the planned displacement of the main CP into the decision support template for the CAB. Detailed planning in coordination with the S-3 (scheme of maneuver) and the S-6 (concept of communications support) should enable the battalion to determine the optimal time to displace the main CP. This helps to ensure that the main CP reestablishes adequate communication with both higher and subordinate units during the decisive operation.

B-60. The CAB staff must be prepared and resourced to execute mission command of the battalion regardless of the availability of digital systems. Sometimes the tactical situation precludes the effective use of digital mission command systems. Therefore, it is paramount that the CAB staff train and rehearse analog methods (for example, frequency modulation voice) of executing mission command over the subordinate units. The staff also can use frequency modulation voice communications to meet the reporting requirements of higher headquarters. The main and alternate CPs must have the necessary tools they need to execute mission command in an analog environment. Such tools include paper maps, overlays, and status chart boards.

Friendly Situational Information

B-61. The creation of friendly situational information is extensively automated, requiring minimal manipulation by CPs or platform operators. Each platform creates and transmits its own position location and receives the friendly locations (displayed as icons) of all the friendly elements in that platform's wide area network. This does not necessarily mean that all friendly units in the general vicinity of that platform are displayed, however, since some elements may not be in that platform's network. For example, a combat vehicle in a CAB will probably not have situational information on a field artillery brigade operating nearby since the two are in different networks. The situational information generated from individual FBCB2-equipped platforms is transmitted to command posts through the main CP server to Maneuver Control System (MCS). The other ABCS can access the friendly situational information picture through MCS.

B-62. Commanders must recognize limitations in the creation of friendly situational information that results from vehicles or units that are not equipped with the latest digital or analog technology. Commanders must enforce training and rehearsals with the systems they will operate with to include units, or attachments they must communicate and share information with.

B-63. With any mission, there are risks to consider. The following are ways to overcome potential shortfalls:

- A digitally-equipped element tracks the location of specified dismounts and manually generates and maintains an associated friendly icon. As an example, the mechanized team XO can generate an icon for dismounted squads.
- The CAB main CP tracks analog units operating with the CAB and generates associated friendly icons.
- A digitally equipped platform acts as a liaison or escort for analog units moving or operating in the CAB AO. The LNO must inform battalion and higher elements of the association of the LNO icon with the analog unit.

Note. Use friendly situational information to deny fires and to aid in the clearance process, but do not use it as the sole source for clearance of fires. This applies to all digital information systems.

Enemy Situational Information

B-64. The hardest and most critical aspect of creating the situational information picture is creating a picture of the enemy. The enemy situational information picture at BCT and CAB levels is the result of multiple inputs – FM spot reports, UAS and JSTAR reports, reports from FBCB2 in subordinate units, electronic or signal intelligence feeds, and inputs from the S-2 section. Enemy situational information generation is partially automated, but it still requires a great deal of work and attention to detail by personnel.

B-65. Personnel at all echelons can generate the enemy situational information picture. At CAB level and below, the primary mechanism for generating situational information is FBCB2. When an observer acquires an enemy element, he creates and transmits a spot report, which automatically generates an enemy icon that appears network-wide. Only those in the address group to whom the report was sent receive the text of the report, but all platforms in the network can see the icon. As the enemy moves or its strength changes, the observer must update this icon. If the observer must move, he ideally passes responsibility for the icon to another observer. If multiple observers see the same enemy element and create multiple reports, the CAB or ABCT S-2 (or some other element that has the capability) must eliminate the redundant icon(s).

B-66. FBCB2 spot reports must include the higher headquarters S-2 in the address group for the data to be routed through the main CP server into Distributed Common Ground System-Army (DCGS-A) to feed the larger intelligence picture. The S-2 section can manually input FM reports received at a CP into the DCGS-A database. FBCB2 and FM voice reports are the primary sources of enemy situational information for fighting the close and rear battles.

B-67. At ABCT level, the S-2 section and the supporting military intelligence company receive intelligence feeds from higher and adjacent units along with feeds from Joint Surveillance Target Attack Radar System (JSTARS), UAS, and the common ground station. They enter enemy information from these sources into the DCGS-A database and send this information via DCGS-A to subordinate battalion S-2s. These feeds, along with FM voice and FBCB2 reports, are the primary source of enemy situational information for BCT's shaping operations and for providing battalions a picture of what is coming into their AOs.

B-68. Usually, BCT and division levels fuse all of the intelligence feeds. The ABCT S-2 routinely (every 30 minutes to every hour) sends the updated enemy situational information picture to subordinate units down to platform level. Since the fused DCGS-A database is focused outside CAB AOs and its timeliness can vary, subordinate CAB elements usually use only the FBCB2-generated intelligence picture. Company teams should stay focused entirely on the FBCB2-generated enemy situational information. The CAB commander and staff refer occasionally to the DCGS-A-generated intelligence picture to keep track of enemy forces that the CAB will encounter in the near future but that are not yet part of the CAB close fight.

B-69. The success of the intelligence effort depends primarily on the ability of staffs to analyze enemy activities effectively; to develop and continuously refine effective IPB; and to create and execute effective collection management plans. Automation and displays greatly help to disseminate information and display that information in ways that foster comprehension. However, for information to be useful, personnel must generate it rapidly and analyze it thoroughly.

B-70. The enemy situational information picture usually is incomplete and less current than friendly situational information. Units must always scrutinize the timeliness and accuracy of the enemy picture. Units must use the picture to focus observers and orient the fire support process. However, units should not use it as the sole source for generating indirect fire support target location data; it usually will not be timely enough.

Graphics and Overlays

B-71. All digital information systems effectively support the creation and transmission of doctrinal field orders. The CAB staff sections usually develop their portions of OPORDs and send them to the S-3 section. The S-3 section then merges the individual portions into a single document, and transmits it via MCS to subordinate,

higher, and adjacent units. When creating OPORDs, remember that the tactical Internet has both fast and slow transmission rates.

B-72. Table B-1 illustrates some of the different data rates for CAB communications systems. Orders and graphics must be concise to reduce transmission times. Orders transmitted directly to FBCB2-equipped systems must meet the size constraints of the order formats in FBCB2. Graphics and overlays should be constructed with the same considerations for clarity and size. Situational information reduces the need for control measures to some degree, but the staff must always consider the integration of analog units and that situational information might not always be available to all elements.

Table B-1. Digital communications planning ranges

System	*Planning Range (Data)*	*Low Data Rate*	*High Data Rate*	*Remarks*
BFT1	Unlimited	2,600 bps	5,200 bps	Satellite, FBCB2 or JCR data
BFT2	Unlimited	12,000 bps	54,000-128,000	Satellite, JCR or JBC-P data
SINCGARS – MANPACK	1-3 km	600 bps	16,000 bps	Data Communications
	3-5 km		4,800 bps	
SINCGARS – VEHICULAR	3-10 km	1,800 bps	16,000 bps	Secondary means of FBCB2 data transmission Primarily used for voice communications
	5-22 km		4,800 bps	
	5-25 km		2,400 bps	
WIN-T	Unlimited	1,000,000 bps	4,000,000 bps	Satellite

bps – bits per second

Radio Networks

B-73. The CAB operates on several external and internal communications networks. Table B-2 provides lists of these networks, and the following paragraphs provide information about each.

Table B-2. CAB radio networks

External Networks	*Internal Networks*
Brigade Command Net	Battalion Command Net
Brigade Operations and Intelligence Net	Battalion Operations and Intelligence Net
Brigade Fire Support Net	Battalion Fire Support Net
Brigade Administrative and Logistics Net	Battalion Administrative and Logistics Net
	Retransmission Net
	Company Nets

Brigade Command Net

B-74. The brigade command net is a secure FM voice net. The S-3 section controls this net at the BCT main CP, and BCT command uses the net to execute mission command. All organic and attached units, the BCT fire support coordinator, ALO, and supporting units operate on this net. The brigade uses the command net to send critical combat information to the CAB commander or the S-3 and to enable the CAB and BCT commanders to talk to each other. The CAB command group, TAC CP, and main CP also monitor this net and respond, if necessary, for the CAB commander.

Brigade Operations and Intelligence Net

B-75. The brigade operations and intelligence (O&I) net is a secure FM net; the S-2 section controls this net at the BCT main CP. The brigade sends all routine tactical reports and other intelligence matters on the O&I net,

freeing the command net for command and critical combat traffic. The CAB command group, TAC CP, and main CP monitor this net.

Brigade Fire Support Net

B-76. The fire support net is a secure FM voice net; the BCT FC controls this net at the BCT main CP. The CAB command group, TAC CP, and main CP monitor this net.

Brigade Administrative and Logistics Net

B-77. BCT A/L net is a secure FM voice net. The BCT S-4 section controls the brigade administrative and logistics (A/L) net at the BCT main CP. The CAB main CP, CTCP, and FTCP monitor this net.

Battalion Command Net

B-78. The S-3 section controls this secure FM net at the main CP. CAB command uses this net for mission command. All organic and attached units, the FSO, the ALO, and supporting units operate on this net. The command net provides the means by which the commander or the S-3 receives critical combat information, and it enables the CAB and company commanders to talk to each other. Other units (such as mortar and scout platoons) also monitor this net and respond if necessary.

Battalion Operations and Intelligence Net

B-79. The S-2 controls this secure FM net at the main CP. The S-2 sends all routine tactical reports and other intelligence matters on this net. This net frees the command net for command and critical combat traffic.

Battalion Fire Support Net

B-80. The fire support net is a secure FM net that the FC controls in the main CP. It is the primary means of calling for indirect fires or CAS for the CAB. Company FISTs, the main CP, command group, TAC CP, and mortar platoon use this net.

Battalion Administrative and Logistics Net

B-81. The A/L net is a secure FM net that the S-4 section controls. The S-4 section uses this net to send and receive A/L reports and coordinate maintenance operations. The CAB XO, company 1SGs, main CP, medical platoon, FSC, and combat trains operate on the A/L net. The CTCP and FTCP also operate on this net.

Retransmission Net

B-82. The CAB S-6 section has one retransmission (retrans) team, which is dedicated to retransmission of any two of the battalion nets. The team has the capability for retransmitting two FM nets using single-channel ground/airborne radio systems (SINCGARS), and it can use its enhanced position location reporting system (EPLRS) to serve as a link in the lower tactical Internet. The S-6 positions the retrans team in the battalion AO, balancing the need to maximize LOS and range with the requirements of local security. Retrans capabilities and limitations are important planning considerations when operating in a noncontiguous AO.

Company Nets

B-83. Each company operates its own command net. The company command net is a secure FM net that the company XO controls in the company CP. All organic and attached elements of the company operate on this net. Company command forward all tactical and logistics reports to the company CP on this net. Subordinate platoons operate their own internal nets.

Communications Systems

B-84. The CAB relies on a federation of communications networks that collectively enables battle command. Not all components of the network are under CAB or ABCT control. The tactical radio network is a critical tool in the fight and must be robust, redundant, flexible, and adaptive. It is important that all CAB leaders are

familiar with the capabilities and limitations of the communications network. Significant components of this network are:

- Single-channel ground airborne radio systems (SINCGARS).
- Warfighter Information Network-Tactical (WIN-T).
- Tactical satellite.

B-85. The SINGARS family of radios is the primary means of voice communications available to the CAB. The CAB uses SINCGARS primarily as a voice transmitter, but also uses it to pass limited data transmissions and for short-range, secure voice communications. The planning range for this system is a maximum of 10 kilometers dismounted and 35 kilometers mounted. Since large terrain features can block FM radios, retransmission teams usually are used to ensure coverage of the BCT AO. SINCGARS features include:

- Very high frequency, FM radio system.
- Secure communications by transmitting tactical voice and data, using COMSEC and frequency hopping technologies.

B-86. The WIN-T suite of equipment is fielded to provide timely, network-enabled support to tactical modular formations. The WIN-T provides BCT and battalion connectivity to the Department of Defense information networks. The CAB has a command post node to provide voice and data capabilities. The command post node is the battalion-level WIN-T system. The command post node provides:

- Enhanced voice and data capabilities.
- Nonsecure Internet Protocol Router Network access.
- Secret Internet Protocol Router Network access.
- Capability to interface directly to satellite or LOS radio transmission resources.

B-87. The CAB has the Spitfire Tactical satellite system. The Spitfire is a single-channel, man-portable, ultra-high frequency SATCOM terminal. The Spitfire provides LOS communication, and has embedded COMSEC. With the use of the SINCGARS Internet controller, it can support beyond LOS extension of the tactical Internet when operating in a retransmission mode. The Spitfire provides critical mission command communications among the division and its subordinate maneuver units. The terminal is usually positioned with the main CP and operates under the control of the S-6.

Tactical Internet

B-88. The tactical Internet is a collection of interconnected tactical radios and computer hardware and software. It provides situational information and data to support mission command at BCT and below.

B-89. The WIN-T provides the transport for relevant information among the BCT and its battalion CPs, and the division/corps CPs.

B-90. In general, the maneuvering vehicles of the CAB rely on these four primary systems for communications:

- Blue Force Tracker 1 and 2 (BFT 1, BFT2).
- Single-channel ground airborne radio system (SINCGARS).
- Force XXI Battle Command Brigade and Below (FBCB2) or Joint Capability Release (JCR) or Joint Battle Command - Platform (JBC-P).

B-91. BFT 1 and BFT 2 are the transceivers (transport) for Position Location Information (PLI) and FBCB2, JCR and /or JBC-P generated data. These transceivers utilize satellites to provide Beyond Line of Sight (BLOS) data communications. .

B-92. FBCB2, JCR and JBC-P application software provides the ability to send digital messages (FBCB2) in addition JCR provides a text chat capability and JBC-P adds Tactical Ground Reporting (TiGR) and collaboration tools. SINCGARS is primarily a voice transmitter, but it can also handle limited data transmissions.

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Glossary

Acronym/Term	Definition
ABCT	Armored brigade combat team
ABCS	Army Battle Command System
AC2	airspace command and control
ADA	air defense artillery
ADAM	air defense airspace management
ADRP	Army Doctrine Reference Publications
AFATDS	Advanced Field Artillery Tactical Data System
AHS	Army Health System
A/L	administrative and logistics
ALO	aviation liaison officer
AMD	air and missile defense
AO	area of operation
AOI	area of interest
ASCOPE	areas, structures, capabilities, organizations, people, and events
ASOC	air support operations center
ATP	Army Techniques Publication
AXP	ambulance exchange point
BAE	brigade aviation element
BAS	battalion aid station
BCT	brigade comabat team
BDA	battle damage assessment
BDAR	battle damage assessment and repair
BEB	brigade engineer battalion
BFV	Bradley fighting vehicles
BHL	battle handover line
BLS	brigade legal section
BSA	brigade support area
BSB	brigade support battalion
BSMC	brigade support medical company
BSTB	brigade special troops battalion

Acronym/Term	Definition
CA	civil affairs
CAB	combined arms battalion
CAS	close air support
CASEVAC	casualty evacuation
CBRN	chemical, biological, radiological, and nuclear
CCA	close combat attack
CCIR	commander's critical information requirement
CLS	combat lifesaver
CMO	civil-military operations
CND	computer network defense
COA	course of action
COMSEC	communications security
COA	course of action
CONUS	continental United States
COIST	company intelligence support team
COP	common operational picture
CP	command post
CSM	command sergeant major
CTCP	combat trains command post
DCGS-A	Distributed Common Ground System-Army
DLIC	detachment left in contact
DP	decision point
DST	Decision Support Tool
EA	engagement area
EEFI	essential elements of friendly information
eMILPO	electronic military personnel office
EOD	explosive ordnance disposal
EPLRS	enhanced position location reporting system
EW	electronic warfare
1SG	first sergeant
FBCB2	Force XXI Battle Command Brigade and Below

Acronym/Term	Definition
FC	fires cell
FDC	fire direction center
FEBA	forward edge of the battle area
FHP	force health protection
FIST	fire support team
FM	frequency modulation
FPL	final protective line
FPOL	forward passage of lines
FLOT	Forward line of troops
FRAGORD	fragmentary order
FSC	forward support company
FSCM	fire support coordination measure
FSO	fire support officer
FSMT	forward support medical evacuation team
FTCP	field trains command post
GPS	global positioning system
HHC	headquarters and headquarters company
HMMWV	high-mobility multipurpose wheeled vehicle
HPT	high-payoff target
HPTL	high-payoff target list
HR	human resourses
HSS	health service support
HVT	high-value target
HUMINT	human intelligence
IBCT	Infantry brigade comabat team
IO	information operations
IPB	intelligence preparation of the battlefield
IR	information requirement

Acronym/Term	Definition
JSTARS	Joint Surveillance Target Attack Radar System
JTAC	joint terminal attack controller
JTRS	joint tactical radio system
LAN	local area network
LC	line of contact
LD	line of departure
LOA	limit of advance
LNO	liaison officer
LOC	line of communication
LOGPAC	logistics package
LOS	line-of-sight
LRP	logistics release point
LTIOV	latest time the information is of value
LZ	landing zone
MBA	main battle area
MC4	medical communications for combat casualty care
MCoE	Army Maneuver Center of Excellence
MCOO	modified combined obstacle overlay
M/CM/S	mobility, countermobility, and survivability
MCP	maintenance collection point
MCS	Maneuver Control System
MDMP	military decision-making process
MEDLOG	medical logistics
MEL	maximum engagement line
METT-TC	mission, enemy, terrain and weather, troops and support available, time available, and civil considerations
MISO	military information support operations
MOPP	mission-oriented protective posture
MP	military police
MSR	main supply route
MTOE	modified table of organization and equipment

Acronym/Term	Definition
MTC	movement to contact
MTF	medical treatment facility
NAI	named area of interest
NCO	noncommissioned officer
NIPR	Nonsecure Internet Protocol Router Network
NTDR	near term data radio
OBSTINTEL	obstacle intelligence
OIC	officer in charge
O&I	operations and intelligence
OPCON	operational control
OPORD	operations order
OPSEC	operational security
PASR	personnel accountability and strength reporting
PBUSE	property book unit supply - enhanced
PCC	precombat check
PCI	precombat inspection
PED	processing, exploitation, and dissemination
PIR	priority intelligence requirement
PLD	probable line of deployment
PMESII-PT	political, military, economic, social, information, infrastructure, physical environment, and time variables
POL	petroleum, oils, and lubricants
PRM	personnel readiness management
PRT	provincial reconstruction team
PVNTMED	Preventive Medicine
PZ	pickup zone
QRF	quick reaction force
RPOL	rearward passage of lines

Acronym/Term	Definition
RFI	request for information
RFL	restrictive fire line
ROE	rules of engagement
RSOI	reception, staging, onward movement, and integration
S-1	human resources staff officer
S-2	intelligence staff officer
S-3	operations staff officer
S-4	logistics staff officer
S-6	signal staff officer
SATCOM	satellite communications
SBCT	Stryker brigade comabat team
SBF	Support by fire
SCATMINE	scatterable mine
SE	site exploitation
SEAD	suppression of enemy air defenses
SHORAD	short-range air defense
SINGARS	single-channel ground and airborne radio systems
SIPRNET	Secret Internet Protocol Router Network
SOF	special operations forces
SOSRA	suppress, obscure, secure, reduce, and assault
SPO	support operations officer
STAMIS	standard Army management information systems
SU	situational understanding
SWEAT-MSO	sewage, water, electricity academics, trash, medical, safety, and other considerations
TAC	tactical
TACP	tactical air control party
TACSOP	tactical standard operating procedure
TAI	targeted area of interest
TDA	tables of distribution and allowance
TLP	troop leading procedures
TMIP	Theater Medical Information Program

Acronym/Term	Definition
TRP	target reference point
UAS	unmanned aircraft system
UMT	Unit ministry team
USAF	U.S. Air Force
USMC	U.S. Marine Corps
VSAT	very small aperture terminal
WARORD	warning order
WIN-T	Warfighter Information Network-Tactical
XO	executive officer

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Reimer Doctrine and Training Digital Library, http://www.atiam.train.army.mil.

Most joint publications are available online at: http://www.dtic.mil/doctrine/doctrine/doctrine.htm.

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ATP 3-90.5 (*FM 3-90.5)
August 2014

By Order of the Secretary of the Army:

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Chief of Staff

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